DOCUMENT RESUME

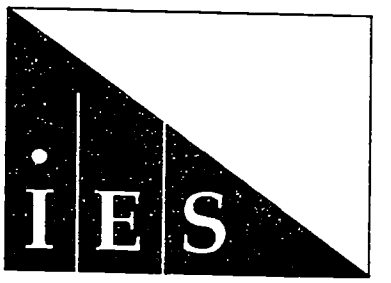
ED 396 149 CE 071 892

AUTHOR Connor, Helen; Pollard, Emma
TITLE What Do Graduates Really Do?
INSTITUTION Sussex Univ., Brighton (England). Inst. for Employment Studies.
REPORT NO IES-R-308; ISBN-1-85184-234-9
PUB DATE 96
NOTE 125p.
AVAILABLE FROM BEBC Distribution, 15 Albion Close, Parkstone, Poole BH12 3LL, England, United Kingdom.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS *Education Work Relationship; Employer Attitudes; *Employment Level; *Employment Patterns; Followup Studies; Foreign Countries; Graduate Surveys; Higher Education; *Job Satisfaction; *Outcomes of Education; School Attitudes; School Surveys
IDENTIFIERS *Career Paths; Employer Surveys; *University of Sussex (England)

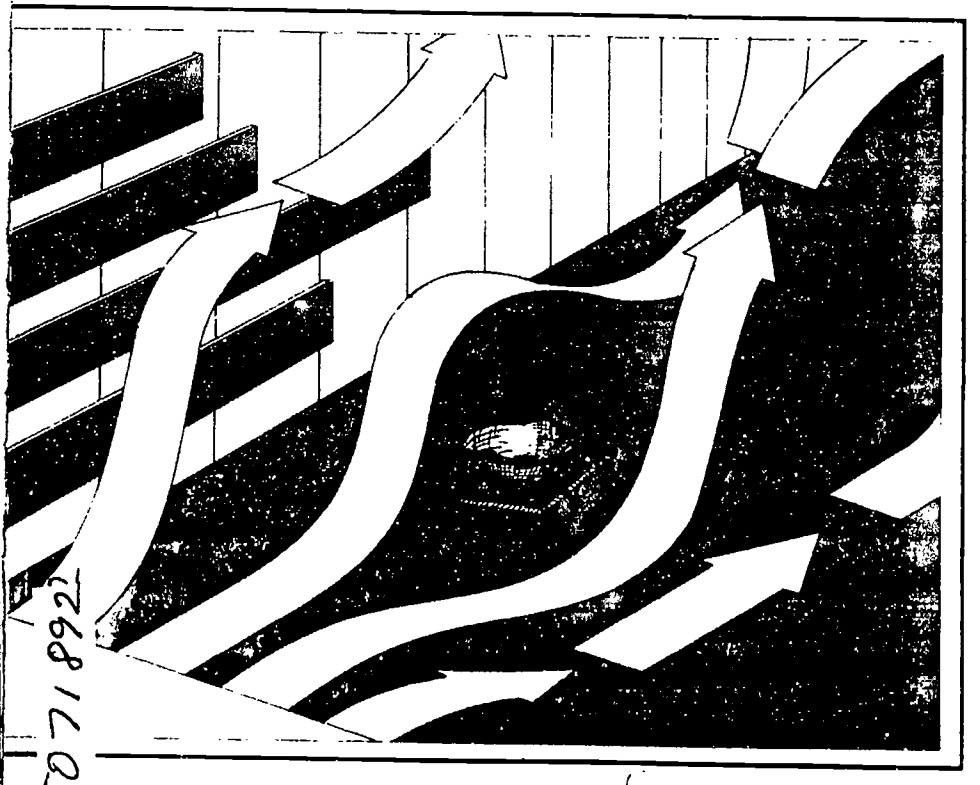
ABSTRACT

The jobs and career paths of graduates of the University of Sussex in 1991-1993 were examined in a 1994 follow-up survey. Of the nearly 2,000 first-degree graduates contacted, 1,023 (56%) completed questionnaires. Within 6 months of graduation, only 2 of 5 respondents were in permanent jobs, 19% were in short-term or temporary employment, and 24% were enrolled in further study. The respondents' average initial unemployment rate over 3 years was 15%. One year later, it decreased to 10%. Male graduates were more likely to find employment soon after graduation. By 18 months after graduation, however, men and women were equally likely to be employed. Subject differences persisted, with graduates in engineering/technology being the most likely to have permanent employment. Significant career turbulence was discovered, but relatively little turbulence was found in terms of career-state change (between the three states of employment, training, and unemployment). Forty-seven percent of applied science graduates were in continuous employment versus fewer than one-third of pure science or social science graduates. Most graduates were satisfied with their current jobs. (Sixty-five tables/figures are included. Appended are the findings of interviews with 10 employers of University of Sussex graduates. Contains 20 references.) (MN)



WHAT DO GRADUATES REALLY DO?

Helen Connor, Emma Pollard



THE INSTITUTE FOR EMPLOYMENT STUDIES

Report 308

WHAT DO GRADUATES REALLY DO?

Other titles from IES:

University Challenge — Student Choices: a Report to CVCP on Students in the 21st Century,
H Connor, R Pearson, G Court, N Jagger
IES Report 306, 1996. ISBN 1-85184-232-2

Skills Requirements and Priorities in the Environmental Sciences
G Court, N Jagger, J Moralee
IES Report 297, 1995. ISBN 1-85184-223-3

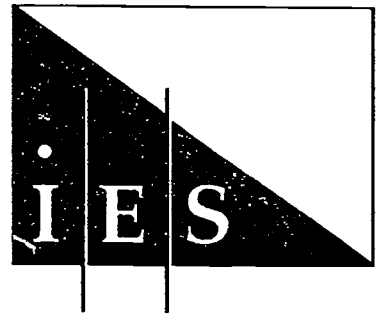
The IES Annual Graduate Review, 1995-96
G Court, N Jagger, H Connor
IES Report 296, 1995. ISBN 1-85184-218-7

The US Labour Market for New Graduates
G Court, H Connor
IES Report 267, 1994. ISBN 1-85184-192-X

Science PhDs and the Labour Market
H Connor, G Court, I Seccombe
IES Report 266, 1994. ISBN 1-85184-191-1

The Labour Market for Postgraduates
H Connor, N Jagger
IES Report 257, 1993. ISBN 1-85184-180-6

A catalogue of these and over 100 other titles is available from IES.



WHAT DO GRADUATES REALLY DO?

Helen Connor, Emma Pollard

THE INSTITUTE FOR EMPLOYMENT STUDIES Report 308

Published by:

THE INSTITUTE FOR EMPLOYMENT STUDIES
Mantell Building
University of Sussex
Brighton BN1 9RF
UK

Tel. + 44 (0) 1273 686751
Fax + 44 (0) 1273 690430

British Cataloguing-in-Publication Data

A catalogue record for this publication is available from the British Library

ISBN 1-85184-234-9

Printed in Great Britain by Microgen UK Ltd

The Institute for Employment Studies

The Institute for Employment Studies is an independent, international centre of research and consultancy in human resource issues. It has close working contacts with employers in the manufacturing, service and public sectors, government departments, agencies, professional and employee bodies, and foundations. Since it was established 25 years ago the Institute has been a focus of knowledge and practical experience in employment and training policy, the operation of labour markets and human resource planning and development. IES is a not-for-profit organisation which has a multidisciplinary staff of over 60. IES expertise is available to all organisations through research, consultancy, training and publications.

IES aims to help bring about sustainable improvements in employment policy and human resource management. IES achieves this by increasing the understanding and improving the practice of key decision makers in policy bodies and employing organisations.

Formerly titled the Institute of Manpower Studies (IMS), the Institute changed its name to the *Institute for Employment Studies* (IES) in Autumn 1994, this name better reflecting the full range of the Institute's activities and involvement.

The Career Development Unit, University of Sussex

The Career Development Unit provides information and careers counselling to the University's population of 9,000 students and supports their transition to employment and further study and training. The term 'development' in its title reflects one of the Unit's main aims — that of developing students' career planning, self presentation and workplace skills by an annual programme of career workshops.

Graduate employers are involved in student briefing sessions and presentations, student focused development activities and, of course, direct recruitment events.

The Unit's innovative development programmes for second year undergraduates, which include workshadowing and a career development programme based on open learning principles, are supported by an active alumni network.

Acknowledgements

We would like to thank all those who contributed to the research: the employers who took part in the telephone interviews; the Sussex University graduates who completed the survey questionnaire; and the members of the Sussex Graduate Network that were involved in the pilot of the survey. Thanks also goes to the staff at Sussex University's Alumni Office who gave advice and information on the data available for Sussex graduates, and for providing us with the sample frame.

Grateful thanks to Nick Jagger, Research Fellow at IES, for his invaluable help with data analysis and with collecting background literature. Thanks also to other IES staff: Gill Court, formerly of IES, for her assistance with background literature and questionnaire design; to Charles Jackson, Senior Research Fellow, for suggestions for modelling career patterns and profiles; and to Richard Pearson, Robin Norton, Monica Haynes, Emma Hart, and Denise Hassany, for providing advice and help.

We would especially like to thank the staff at the Career Development Unit of Sussex University, under the direction of Ben Ball and Carolyn Morris, for providing essential resources and support. Extra special thanks to Bridget Millmore for her continual advice, helpful comments, and project guidance.

Contents

Executive Summary

Graduates now face a less predictable, more rapidly changing and more competitive labour market than their predecessors of even a decade ago. The notion of what constitutes a graduate job has broadened and the assumption that typically graduates go into permanent, professional level employment is less tenable now than it ever was. Finding out what graduates *really* do, and the variety of career paths they follow, can help current and prospective students make informed decisions about career plans and provide beneficial feedback to universities about employer demand and outcomes of degree study.

This report presents the findings of a 1994 follow-up survey of graduates from the University of Sussex in the years 1991 to 1993. It provided a detailed perspective about labour market outcomes over a number of years. Nearly 2,000 first degree graduates were contacted in the survey, and 56 per cent responded by completing a questionnaire about their jobs and career paths. The research was undertaken jointly by the Institute for Employment Studies (IES) and the University of Sussex Career Development Unit (CDU) under the auspices of the IES/UoS Joint Research Fund.

The achieved sample of graduates represented one in three of all first degree home students graduating over the three years, 1991, 1992 and 1993. It broadly reflected the main characteristics of the university's graduate output in these years. It comprised slightly more women than men, and slightly more graduates with BA than BSc degrees.

Initial destinations

Six months after graduation, nearly three in five of the graduates were in employment, and a further 24 per cent were taking further study. However, almost one in three of those graduates in employment were in short-term or temporary jobs (lasting less than three months). The average initial unemployment rate over the three years was 15 per cent, but this peaked in 1992 at 18 per cent, mainly due to the more adverse national labour market conditions prevailing at that time.

At this six month stage, women were less likely to be unemployed than men, as were engineering graduates compared with other science graduates and, in particular, some arts

graduates. Graduates with higher degree classes were also more likely to be in jobs.

Subsequent progress in the labour market

Success in the labour market improved as time passed. One year after graduation, unemployment rates had dropped for all three years' output, to ten per cent on average. Almost half of the graduates were in permanent jobs and a further 15 per cent were in temporary jobs. 1992 graduates still appeared to be suffering a comparative disadvantage in the labour market compared with other years. Six months later (*ie* 18 months after graduation) the proportion of the total sample in permanent employment had increased to 56 per cent, though the unemployment rate remained at around ten per cent.

Many of the differences between graduates identified at the six month stage diminished over time. Thus, the gap between the unemployment rate of men and women narrowed, as did that between mature and younger graduates and graduates with different classes of degrees. Subject differences still persisted, however, reflecting the different career paths followed in the first 18 months after graduation.

Looking further on, to three years after graduation, 72 per cent of the 1991 cohort were in permanent employment, considerably higher than the 41 per cent recorded at the six month stage. Two out of three of those who had been unemployed initially were in employment three years after they had graduated.

Although the most common career profile was to be in continuous employment over the three years, this applied to only 30 per cent of the 1991 graduate output. A great number of different career profiles, in terms of career states (*ie* in work, out of work, in study) were identified. Those which had experienced a period of temporary employment at some stage tended to have more turbulent career patterns than those that did not. Degree subject was a key variable in analysing career state changeability. Applied science graduates were more likely than other graduates to have less complex career profiles.

Temporary working

Most graduates had held at least one job since graduating but for some this had been a temporary or short-term job (lasting less than three months). One in five had gone into a temporary job within the first six months. This proportion was similar for the 1991 and 1993 graduate outputs. Temporary working tended to be restricted to the early stages of career development, and it was relatively uncommon for graduates to take a series of temporary jobs lasting more than 12 months in total duration. The type of temporary work varied widely, but its focus was

below professional level. The majority took temporary work for financial reasons, but some did so to gain work experience.

Postgraduate study

A high proportion of the sample, over 60 per cent, had taken further study at some stage, the majority starting it within the first six months of graduation. The highest incidence of further study was among 1992 graduates, reflecting the dual effects of poor graduate employment conditions and the increasing availability of postgraduate places, especially on masters and diploma programmes. Only one in four remained locally within the Sussex counties to take postgraduate study.

Current job

The current jobs of the graduates were analysed in detail. Most were full-time rather than part-time or of a variable hours working pattern. Only six per cent were self-employed, but one in three were on fixed term contracts, over half of which were of at least 12 months duration.

A considerable variety of occupations was recorded. While the majority (78 per cent) were in higher skilled occupations (classified as managerial, professional or associate professional/ technical), including nearly 40 per cent in professional occupations, the remainder were in a wide range of lower-skill level jobs, mainly in clerical, sales and personal service occupations. The most significant occupation (numerically) was teaching (13 per cent of the total). Most occupations were occupied by less than five per cent of the sample.

There was evidence of a broadening in the range of jobs recorded over the three years, as well as the appearance of 'new' graduate jobs. Fewer 1993 graduates were in professional occupations, and more were in clerical and secretarial jobs. Fewer female than male graduates were employed in managerial/ professional/technical level jobs. Engineers and technologists were more concentrated in professional level occupations than graduates from other disciplines. There was also a widening salary range, but on the whole salaries were relatively low. While ten per cent of the 1991 cohort were earning in excess of £20,000 by the end of 1994 (three years after graduation), half were earning under £14,000. The highest salaries recorded in all three years' output were by graduates in mathematical sciences (including IT).

There was a bias towards the services sector, with one in three being employed by a public sector organisation, and one in five by a financial services company. Small firms were well represented: two out of five graduates were employed in firms with under 200 employees, including 15 per cent in firms with

less than 20 employees. One in five graduates were working in the local area (East or West Sussex). This represents a net gain to the locality, as only one in ten of the graduates had been living locally prior to entry to their first degree. More of the 1994 output were employed locally.

Underemployment featured in the jobs of the majority of respondents, and was investigated in different ways. While the vast majority, four out of five, considered that their current job was broadly at graduate level (*ie* their degree was relevant to getting or doing it), less than half said that a degree was an entry requirement and ten per cent were in jobs which previously had not been occupied by a graduate. However, three quarters felt that their degree had been helpful in getting their current job, though only half felt it had been the main influencing factor. Other factors of influence included the specific subject of their degree, work experience during/before university and since graduation, postgraduate qualifications, personal characteristics, and their personal contacts in companies. When asked to assess the extent of any underemployment being experienced, 26 per cent felt very underemployed and 33 per cent felt slightly underemployed. This was mainly caused by the lack of intellectual challenge in their jobs, the under-use of their degree skills and the feeling that they had more to offer than was being required of them.

Career satisfaction

The main difficulties graduates had experienced in their careers to date were the lack of career development opportunities and dissatisfaction both with training provision in jobs and the lack of sufficiently challenging intellectual work. Experiences in their current job on the whole had lived up to initial expectations, the main exceptions being: the career opportunities available, training provided, and getting feedback on performance where expectations generally exceeded experiences. In general, they were mainly satisfied with their current job. Higher levels of dissatisfaction were recorded by graduates in lower skill level jobs and by those who perceived themselves to be very underemployed.

Career planning had been engaged in at various stages, but only one in three of the graduates had started thinking about careers before university and slightly more while at university. There was an increasing trend over the three years to start thinking about careers at an earlier age, and evidence that early career planning pays off in terms of gaining permanent employment and experiencing less unemployment. The university's Career Development Unit had a high level of usage, mainly during degree study (when 80 per cent had used its services), but also afterwards (40 per cent).

Since graduation, most graduates had experienced some difficulties with the development of their career, mostly relating to the lack of job opportunities available, but also due to an absence of career guidance or direction and a lack of specific skills training. Despite these difficulties, the overall level of satisfaction with career to date was comparatively high, although it appeared to be declining over time. In particular, the 1993 cohort were more dissatisfied with the lack of jobs available and the use of their skills and knowledge.

Conclusion

In conclusion, this research has provided new insights into the employment experiences of graduates and their career progress over the first few years. It is the first large scale survey of this kind ever undertaken at the university, and hopefully will not be the last, as it has provided a wealth of new information about what graduates *really* do and how they feel about their jobs and careers. In particular, it has shown how labour market experiences change as time passes, and that measures of initial success in the labour market are not realistic to use as outcome measures for the majority of graduates. It has also highlighted the differences between graduates in their employment prospects, in particular from different degree disciplines, and the wide diversity of career routes being followed and job outcomes. Graduates are taking up a broad range of jobs, in some cases displacing less qualified people. Underemployment is affecting the majority of them, but is felt in different ways. So, too, is the lack of job opportunities available to develop subsequent careers in the ways they initially expected.

1. Introduction

This report is about the employment and early career experiences of graduates from the University of Sussex. It contains some of the findings of a research project undertaken jointly by the Institute for Employment Studies (IES) and the university's Career Development Unit (CDU) between July 1994 and December 1995. This included a survey completed by over 1,000 of the university's graduates from 1991 to 1993.

1.1 Background

For some time, the University has been interested in finding out more about the employment destinations of their graduates and how they progress in the labour market. There are several reasons for this. Firstly, Sussex graduates, like those from other universities, are known to be entering a wider range of jobs and careers than previously. Fewer UK graduates are entering large firms and formal graduate training programmes (Connor *et al.*, IES, 1993), and more are entering commerce and services than manufacturing industry. It is suspected that more Sussex graduates are staying in the locality and more are joining firms which previously have not recruited graduates, in particular small firms. Up-to-date information about graduate employment can help current students in their career decisions. Equally important is the insight it gives to careers advisers about new opportunities for graduates, especially where firms are unknown to the CDU or are using new recruitment methods.

Secondly, graduates are following different career paths (Brennan *et al.*, 1993; AGR, 1993). They are taking longer to settle into a job which is viewed by them as part of a career (*Guardian*, 1995) and are more likely to take postgraduate study or a series of short-term jobs in the first year or so after graduation. The available data on graduate employment (the 'first destinations statistics') provide an early 'snapshot', at approximately the six month stage. It is important that students have information and realistic expectations of likely jobs and career outcomes over a longer time period. It is also important for academic staff to have information about employment outcomes, to help monitor and develop courses and for quality assessment purposes.

Thirdly, at a broader level, the university is interested in getting more feedback of personal experiences of life after Sussex, and of

the university's contribution to the supply of qualified manpower, in the local economy, nationally and internationally.

The research also relates to some general trends and policy issues affecting higher education and graduate jobs. The rapid growth of graduate output, coinciding with a time of economic recession in the UK in the early 1990s and downturn in graduate demand, led to rising unemployment levels, strong competition for available jobs and more graduates taking jobs previously filled by less qualified people. It also led to some graduates taking further qualifications in the belief that it would improve their job-getting prospects. While graduate demand is now improving and unemployment levels falling (AGR/IES reports 1993-95), the continuing expansion in output from higher education and the greater range of jobs available to graduates are likely to lead to more graduates taking jobs previously filled by non-graduates. The extent to which graduates are using the high level skills they have acquired has not been assessed in any significant way. A recent study (Mason, 1995) provided a detailed examination of graduate recruitment and utilisation in two sectors, but there has been little parallel quantitative research undertaken on the extent of graduate underemployment. Other bodies (CBI, 1994, TEC National Council 1995, CIHE 1995), have also highlighted the decline in the traditional graduate job.

There are also some specific issues about graduate quality which need more investigation. Some graduate recruiters are reporting specific difficulties in filling vacancies because of a lack of suitable applicants (AGR, 1995), and one of the main criticisms is the lack of personal transferable skills of many graduates (*ie* in team working, numeracy, capacity for taking initiative, communication, *etc.*). These are not new deficiencies but ones which are being given more emphasis within higher education currently, through the various *Enterprise in Higher Education* initiatives, in order to improve graduate employability.

Finally, there is the issue of increasing student diversity. The graduate population is made up of an increasing number of people with different characteristics — more women, more older students, more entering via a vocational route, more with some kind of prior work experience, and a greater mix of social and ethnic backgrounds (IES/CVCP 1996). As higher education attracts a wider range of people with varying goals, it is only to be expected that the subsequent careers will be different and become more heterogeneous. The graduate labour market is becoming more fragmented. There is a need to look beyond the overall employment trends and analyse the progress of different kinds of graduates in different parts of the labour market.

1.2 Objectives

The main aim of the research was to investigate the labour market experiences of graduates from the University of Sussex in the early 1990s. It investigated the following areas:

- **The changing nature of careers**

What do early careers look like? How variable are they? How successful are Sussex graduates in getting permanent work? What are the reasons behind specific career decisions?

- **The changing nature of jobs**

  What kind of jobs do Sussex graduates get and where? Are they graduate level jobs? How did they get them? Problems encountered in employment.

- **Expectations**

  What did graduates expect from employment? Were these expectations met? How satisfied are they?

- **Skill development**[1]

To what extent were skills developed while at Sussex? How useful have they been subsequently?

- **Career development**

  What difficulties do graduates experience in developing their career? How satisfied are they with it? What kind of career planning did they do?

The overall purpose was to provide the university and its current students with valuable information about career outcomes of former students, and also more generally to explore the changing nature and level of graduate jobs and the career paths they follow.

1.3 Scope of the research

The study was undertaken under the auspices of the University of Sussex/Institute for Employment Studies Joint Research Fund. This is intended to encourage joint working between the two organisations in areas of mutual interest and benefit.

The study focused on a specific time period — 1991 to 1995. This was a time of firstly falling, then gradually improving, graduate demand and employment opportunities, as the economy moved out of recession. It followed the sharp downturn in the graduate market which took place between 1990 and 1991, after the buoyant eighties, when initial graduate unemployment in the UK doubled to ten per cent. It then rose further to a high of 13

[1] Aspects of skill development are not included in this report, but have been reported on separately to the University.

per cent in 1992, and now stands at just under ten per cent nationally. It was also a period in time when there was a growing glut of graduates in the economy, a situation which, though less noticeable now, is likely to persist for the foreseeable future (Connor, 1995). Since the late 1980s, there have been major changes in the shape, size and characteristics of the new graduate population, and in the types of jobs, sectors and companies they join. The survey time period, therefore, provides an up-to-date picture of the graduate market of the 1990s.

The subject was full-time undergraduates from the University of Sussex, *ie* those completing first degrees. This naturally excluded many other students, mostly postgraduates, who also have interesting career paths. Undergraduates, however, form the main output of the university to the labour market in any one year and are the main 'customers' of the CDU. Experiences following postgraduate study were still able to be investigated in the survey, as many first degree graduates had undertaken taken further study and were questioned about it.

1.4 Methodology

The main element of the research was a survey of first degree graduates from years 1991, 1992 and 1993. This comprised a sample of 1,928 graduates in total.

The graduate survey

The sample was selected from the University's Alumni database. This was first assessed for its reliability relating to contact addresses and its comprehensiveness and likely bias through discussions with the Alumni Administrator. It was agreed that it was the most appropriate sample base to use for our purposes.

All subject groups were covered except education. Those graduating with BEd degrees were excluded because they number only about 50, tend to be already in employment and most go directly into a teaching post on completion. Graduates whose home domicile was non-EC countries were also excluded, as most return to their country of origin on completion of their studies in the UK.

A random sample of one in two graduates was selected from years 1993 (534 graduates selected) and 1992 (436) and all graduates from 1991 (958), making 1,928 in total. The 1991 sample was larger because it was expected to produce a smaller response (due to contact addresses being more likely to be out of date) and it was important to ensure that the survey produced sufficient information on careers spanning several years.

The survey was sent out at the end of November 1994. After two reminders, a total of 1,023 were received by early March when the survey was closed, an overall response rate of 53 per cent. A small number (97) were excluded from the analysis because they had not been, or were only partially, completed (including Post Office returns). Details of the survey response are shown in Table 1.1.

The survey produced a satisfactory response rate, almost 56 per cent overall. As was expected, the 1993 sample (with the more up-to-date addresses) produced the highest response, 62 per cent, compared with 55 per cent for 1992 and 52 per cent for 1991.

It is worth noting that this was a retrospective survey, and thus relied on the recall of individuals about their experiences over a number of years. For some, it was only a year; for others, almost three years. Inevitably, this is a source of potential error as some respondents may have omitted, or forgotten in detail, short periods of employment or unemployment.

Other research activities

In addition to the survey, the research comprised several other related components:

- a preliminary literature review to assess the context and findings of other graduate employment and career studies, in order to help develop the graduate questionnaire and refine the design of the study
- collation and analysis of existing data on Sussex students including admissions, first destinations and other graduate employment information
- comparisons with UK data to show the extent of similarities and differences between Sussex and the graduate population as a whole

Table 1.1: Survey response

Year of graduation	1993	1992	1991	All
Number of questionnaires				
– mailed	534	436	958	1,929
– returned	342	249	529	1,120
– Post Office returns	20	13	52	85
Inappropriate returns	1	1	2	4
Non participants	2	4	2	8
Number of questionnaires analysed	319	231	473	1,023
% response rate	59.7	53.0	49.4	53.1
% effective response	62.4	55.3	52.4	55.9

Source: IES/CDU

- interviews with a small sample of employers, including some new locally based recruiters, to provide insight into their demand for graduates and recruitment methods, (see Appendix).

1.5 Outcomes

The main outcome of the research is this report on the graduate survey findings. Its contains seven chapters:

Chapter 2 describes the sample of graduates in terms of their main characteristics, and draws comparisons with the population from which it was drawn and nationally, with data from all UK universities.

Chapter 3 summarises the career progress of the graduates in terms of activities they were engaged in at different time periods following graduation (6, 12, 18 months *etc.*).

Chapter 4 focuses on each of the main activities (permanent jobs, further study, unemployment, *etc.*).

In Chapter 5, details of their current jobs are presented, including occupation, level, sector, location, size of company and pay.

The extent to which they are satisfied with their current jobs, feelings of being underemployed and difficulties with jobs and career progress to date are discussed in Chapter 6.

Finally, Chapter 7 draws together the main conclusions of the research and implications for students, their careers advisers and lecturers, and the university.

Information from the employer interviews has been summarised in the Appendix.

As well as this main report, a number of working papers and sets of tables have been produced for use internally by the university, for example on the role of postgraduate study, on subject differences, the use of the CDU by students, and on graduates' views on their skill development during degree study. The survey database has also been of value (and will continue to be so) in providing insights to individual careers advisers and academic staff about career paths of particular types or groups of students. For further details please contact the CDU.

2. The Graduates

Before presenting the data on the employment outcomes and experiences of the graduates surveyed, we first, in this chapter, present further details on the sample itself.

The graduates in the sample are described here in terms of their personal characteristics and backgrounds. Comparisons have been made, where possible, with the university population to identify any significant areas of survey bias, and also with the UK student population.

2.1 Personal profile

The graduates were selected from three years' output from the University of Sussex. Almost half of the respondents (473) had graduated in 1991, 22 per cent (231) in 1992 and the remaining 31 per cent (319) in 1993. The total sample of 1,023 graduates represents around one in three of all 'home' students graduating with first degrees[1] from the University of Sussex between 1991 and 1993.

Gender

Overall, 56 per cent of the sample were female and 44 per cent male. This is slightly higher than the female percentage in the relevant graduate population from Sussex for those years (52 per cent overall). This bias is a result of the higher response rates from women than men in each year, but particularly in 1992 (Table 2.1). It is also due to the higher overall response rate in 1993 than in 1991, where the representation of women in the population was higher.

Compared to the total output from UK universities ('old' sector only) between 1991 and 1993, the sample of University of Sussex graduates contains a higher percentage of female graduates than the UK average (56 per cent compared with 46 per cent nationally). (*Nb*: if the new universities were included in the national data then the proportion of women would be higher.)

[1] Excluding BEds.

Table 2.1: Gender distribution in sample and population

		1993	1992	1991	All
Sample:	% Female	56	60	54	56
	% Male	44	40	46	44
	N	*319*	*231*	*473*	*1,023*
Population:	% Female	54	53	49	52
	% Male	46	47	51	48
	N	*1,118*	*1,032*	*1,034*	*3,184*
Survey response rate %		62	55	52	56

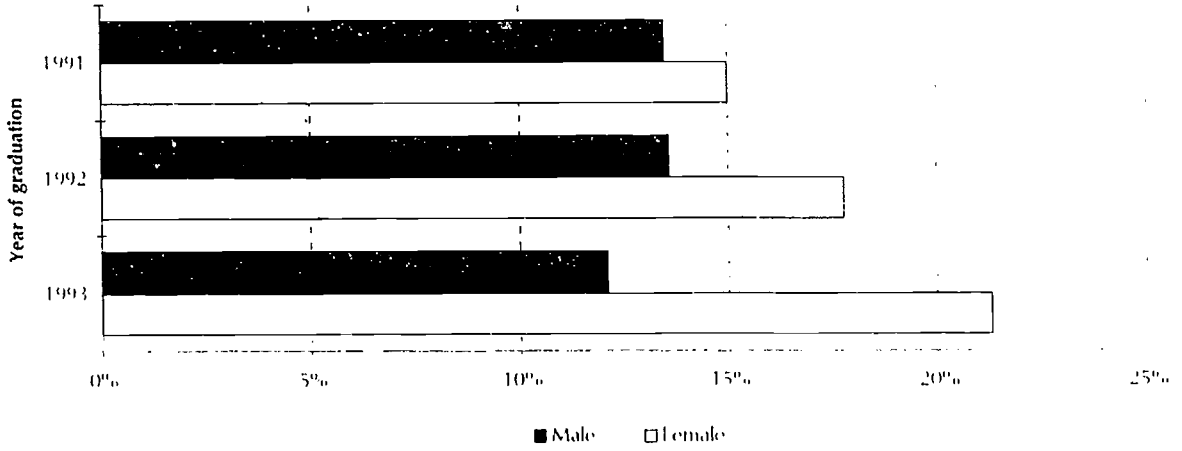
Source: IES/CDU Survey

Age

Turning to the age breakdown, 16 per cent of the sample had been mature students — *ie* aged over 21 years on entry to their degree course. This is slightly lower than in the university population, 19 per cent (*nb:* this is the average 1993 and 1992 population figure because comparable statistics are not available for 1991).

The proportion of older students in the sample increased over the three years, from 14 per cent in 1991 to 17 per cent in 1993 (Table 2.2). This is partly explained by the gender breakdown and the higher proportion of female than male mature students — 21 per cent of 1993 female graduates in the survey were aged over 21 years on entry compared with 12 per cent of men for that year (see Figure 2.1).

Figure 2.1: Percentage of male and female graduates who were mature students (over 21 years on entry), by year of graduation



Source: IES/CDU Survey

Table 2.2: Age distribution in sample and population

		1993	1992	1991	All
Sample:	% aged 21 years or less	83	84	86	84
	% aged over 21 years	17	16	14	16
	N	*314*	*223*	*469*	*1,006*
Population:	% aged 21 years or less	81	81	*	81
	% aged over 21 years	19	19	*	19
	N	*1,239*	*1,143*	*	*2,382*

Source: IES/CDU Survey

Marital status and children

At the time of the survey in late 1994, 65 per cent were single. The women in the sample were much more likely to be married or in permanent relationships than men. Of those in relationships, 68 per cent were women and only 32 per cent were men. This almost certainly reflects the higher proportion of mature women than mature men in the sample, and the higher proportion of female than male married students (though marital status while at university was not asked in the survey).

A very small proportion of the sample, six per cent, had children living with them at the time of the survey, and the majority (75 per cent) of them were women.

Location

Three out of four graduates were currently living in Southern England, and one out of four were in the immediate vicinity, *ie* in East or West Sussex. 1993 graduates were more likely to be living locally than either 1991 or 1992 graduates. A small proportion of the total, nine per cent, were abroad, including five per cent in other European countries (Figure 2.2).

Ethnicity

The sample was predominantly white. Only nine per cent were from ethnic minority groups. This was made up of 1.7 per cent Black, 2.5 per cent Indian, 1.3 per cent Pakistani/Bangladeshi, one per cent Chinese and 2.6 per cent Others (*eg* Mixed, Middle eastern, South American).

2.2 Prior to Sussex

Home location

The vast majority of the sample (70 per cent) had been living in the South of England before coming to study at the university.

This is slightly less than the proportion currently living in the South of England (76 per cent). They are in fact mostly the same people — 86 per cent of those who came to study at the university from the South of England were currently also living there. This focus on the southern part of the country shows that the university has a stronger regional, and less of a national market, than previously thought. The local area is less important than the wider region — just over one in ten were drawn from East or West Sussex. However, as shown in Table 2.3, mature students were much more likely to have been drawn from the local Sussex population (43 per cent lived there), showing the strength of the local ties for this group of students in particular. Mature students are generally less mobile than younger ones, preferring to stay at home and to go to their local university, and this is demonstrated by the survey results.

While the overseas market is growing, it represented only six per cent of graduates (including five per cent from other EU countries).

There is anecdotal evidence that the South of England is viewed as being expensive in terms of living costs and so can be a 'put-off' for people living outside of the South. This is probably one explanation of the southern bias in the sample, and as shown later (section 2.4), location was less important than other factors for people from the North and Midlands, in choosing to study here.

If we compare current with previous location, as in Figure 2.2, there is evidence of a net inflow into the locality from other English regions. While 11 per cent overall had been living in Sussex prior to studying, 25 per cent had remained. The inflow is stronger for young graduates: five per cent of graduates aged under 21 years on entry to their degree had been living in Sussex while 20 per cent were now living there.

The 1993 sample was slightly more likely than either the 1992 and 1991 samples to be drawn from East or West Sussex (13 per

Table 2.3: Location of students, prior to Sussex, by age (percentages)

	Mature students*	Younger students	All
East and West Sussex	43	5	11
Greater London	17	26	25
Rest of Southern England	31	36	35
South of England Total	**91**	**66**	**70**
Rest of England	6	23	20
Rest of UK	2	5	4
Outside UK	1	7	6
N	*156*	*843*	*999*

*aged 21 plus on entry

Source: IES/CDU Survey and Sussex University

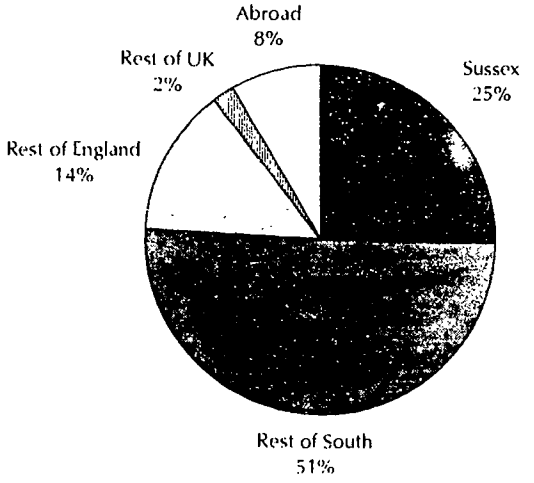
cent of 1993 graduates compared to ten per cent for earlier years). This reflects both the rising proportion of older students as well as an increasing propensity generally for younger students to stay at home and study locally, mainly for financial reasons.

Work experience

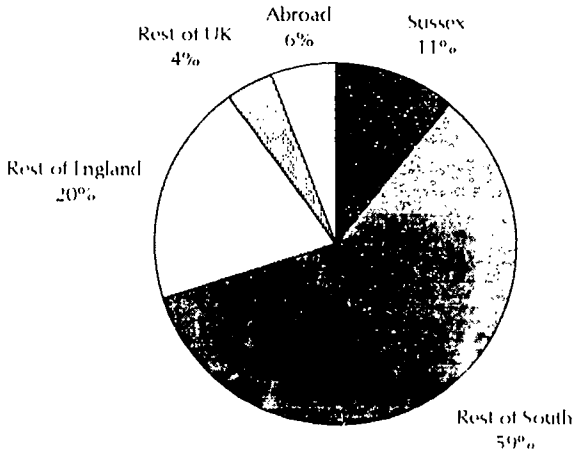
Almost all graduates had some work experience before taking their degree course, the main type being vacation work experience (experienced by 65 per cent). A further 59 per cent had been in part-time employment (weekends or evenings mostly) and one in four had voluntary experience. Almost half however, had been in full-time employment prior to entry, and one in ten had experienced more than five years of full-time employment.

Figure 2.2: Home locations of graduates a) currently and b) prior to coming to Sussex University

a) **Current**



b) **Prior**



Source: IES/CDU Survey

Table 2.4: Extent of work experience prior to Sussex, by age

	Mature students	Younger students	All
Full-time employment	98	33	43
Part-time employment	36	63	59
Voluntary work	28	26	26
Vacation work	26	72	65
None	1	6	5

Source: IES/CDU Survey

The nature and amount of prior work experience varied naturally with age. As Table 2.4 shows, almost all mature students had experience of full-time employment compared to just one third of younger ones. Part-time employment had been experienced, however, by two out of three younger students, and rather more had done some vacation work. Only six per cent of younger students had no work experience at all before their degree study.

These results show that a significant number of students at the University of Sussex come in with some prior experience of the world of work, and some with extensive experience. This is not the traditional stereotype of a university student. As the age profile of the student population increases, and more of the younger students gain work experience (via holiday jobs, work experience placements at school, taking a year off, *etc.*) it is likely to grow in significance. It is important that academic staff are aware of the skills and experience of their students in the development of courses and that students build on it in developing their skills. Recruiters may also be less aware of this trend, and be making wrong assumptions about the graduates from this university.

Entry qualifications

Although substantial numbers had employment experience, most had 'traditional' educational qualifications — 87 per cent had 'A' level (or 'AS') level of qualifications. Only four per cent had vocational qualifications, *eg* BTEC, HNC, and nine per cent had other/no qualifications.

Among the mature graduates, however, just over half had 'A' or 'AS' levels. Ten per cent had HNC, OND or BTEC awards but 33 per cent had other or no qualifications. An increasing proportion without 'A' levels or vocational qualifications (from 23 to 44 per cent).

Most of the students entering with vocational entry qualifications had taken engineering or technology degrees (25 per cent were from that subject group), while the majority of those with other

or no formal qualifications had studied social sciences or humanities.

Looking at 'A' levels only, 60 per cent of the sample had three 'A' levels and 18 per cent had four or more. The average (*ie* mean) 'A' level points (according to the UCCA system, ten for A, eight for B, *etc.*) was 21 points. Half of people qualified to 'A' level had at least 20 UCCA points.

2.3 Degree study

Overall, just over half of the sample (58 per cent) had taken a BA degree and 42 per cent had taken BSc/BEng degrees. Women were more likely to have taken a BA (68 per cent did so) than men (45 per cent), and conversely less likely to have done a BSc/BEng (32 per cent compared 55 per cent). This is in line with the population profile.

Looking more closely at subjects, 30 per cent had graduated with degrees in social sciences and 26 per cent in other arts and humanities; 16 per cent, the largest group of BSc/BEng graduates, had taken mathematical sciences (*ie* pure and applied maths, IT, computer science), 11 per cent had taken biological sciences and 12 per cent physical sciences, with just five per cent from engineering/technology. This broadly matches the University of Sussex graduate population breakdown in the years 1991 to 1993. The main area of bias in the sample is the higher response rate achieved from social science graduates, making up 30 per cent of the sample, compared to 25 per cent in the population, and the slightly lower response rates from biological science and engineering graduates. By year, there is a slight variation by subject, but no discernible trend.

As Table 2.5 shows, there is considerable difference by gender in subject of study. In the engineering/science area, women had predominantly studied biological sciences, while men were spread more across the various subjects. In the arts/social

Table 2.5: Subject of study by gender

	Male	Female	All
Biological sciences	7	14	11
Physical sciences	17	9	12
Mathematical sciences	26	8	16
Engineering/technology	10	1	5
Social sciences	22	36	30
Languages	9	20	15
Other Arts/humanities	9	12	11
N	*451*	*572*	*1,023*

Source: IES/CDU Survey and Sussex University

sciences, men were concentrated in social sciences with considerably more women than men taking languages. This is again in line with what one would expect from the population data.

Compared to the UK graduate output for the years in question, the University of Sussex sample is under-representative of engineering/technology graduates (reflecting the lower than average provision of engineering at Sussex) and over-representative of mathematical science graduates (mostly IT) and social scientists (both University of Sussex strengths).

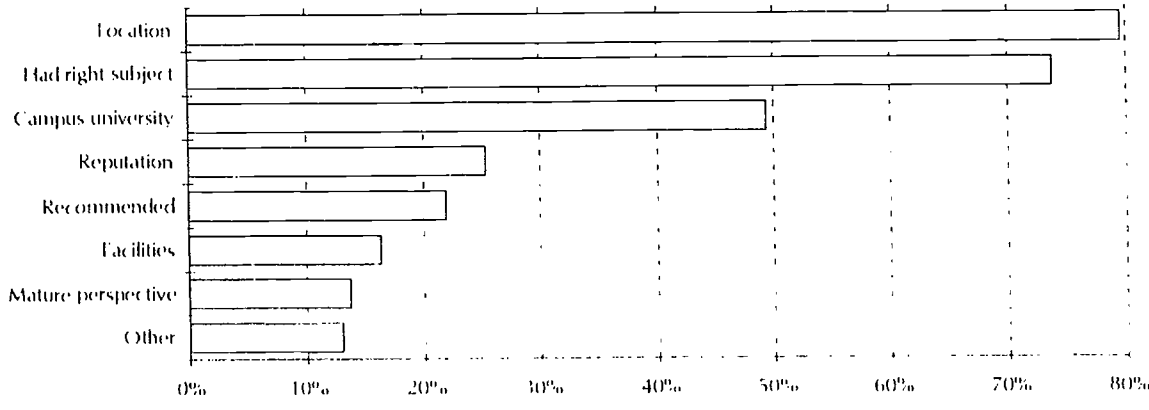
Three out of five graduates gained an upper second or a first class degree. This is slightly higher than in the university graduate population for those years (54 per cent). The proportion gaining first class degrees in the sample increased between 1991 and 1993, from almost ten to over 12 per cent, while the proportions in the population remained level. Mature graduates tended to have better degree passes: 70 per cent gained a first or upper second and few had a third or pass.

Three out of five graduates had debts of £500 or more on leaving Sussex, and a small number (eight per cent) owed in excess of £3,000. The percentage with significant debt (over £1,000) increased from 36 per cent for the 1992 cohort to 44 per cent for 1993, but this was only slightly higher than the 41 per cent figure for the 1991 cohort.

2.4 Reasons for studying at Sussex

As shown above, the vast majority of the sample were drawn to the University of Sussex from locations in the South of England, and one in ten were from the immediate vicinity (East or West Sussex). But what attracted them to study at Sussex? What were the main motivating factors for choosing their degree course?

Figure 2.3: Reasons for choosing to study at the University of Sussex (percentages)



Source: IES/CDU Survey

Four out of five respondents gave location as a reason for choosing Sussex University, only slightly more than those who gave subject preference. Half of the graduates said they chose Sussex University because it was a campus university. Other reasons were given by under 30 per cent of the sample. There were some variations from year to year in the reasons given, for example, the percentage selecting 'reputation' as a reason for coming to the university shifted from 29 per cent of the 1991 graduate cohort to 20 per cent of 1992 and to 24 per cent of the 1993 graduate cohort.

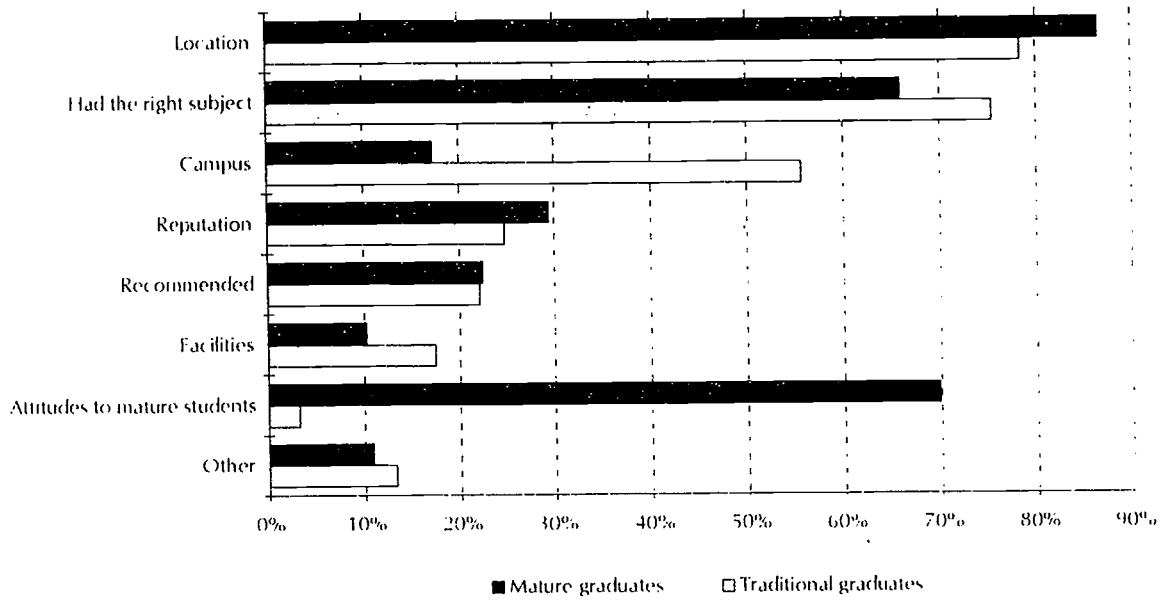
Location was equally attractive to men and women, but slightly more of the men than women were attracted by the campus environment (55 per cent compared with 45 per cent). Conversely, slightly more of the women gave the positive attitude to mature students and the choice of subject as the reasons for coming (16 compared to 11 per cent and 76 compared to 72 per cent respectively). Engineering and maths students were more attracted by the campus and facilities, but this reflects the male dominance of this group; similarly, social science graduates, where females are clearly in the majority, were more likely to give reputation and recommendation as the main reason for coming to the University of Sussex.

Analysis by home location also produced some variation in response. It appeared that the less distance the graduates had to travel to the university, the more important location became. Thus, 92 per cent of Sussex-based students gave location as the most important reason, compared to 80 per cent for the sample as a whole, 74 per cent for Scottish or Welsh students, and 59 per cent for non-UK students. This finding is undoubtedly linked with age as the majority of Sussex-based graduates were mature entrants, and location was given as a reason for choosing the university by more of the mature than the younger graduates overall. Interestingly, the campus environment is considerably less important to Sussex based students than to others (only 17 per cent gave it as a reason for choosing to study here compared to half of the others). Again, this is linked closely to age. The two main factors for both mature and younger students were location and right subject (each given by over two thirds as a reason for coming to the university). For mature students the 'positive attitude to mature students' also featured strongly (given by 70 per cent), while for younger ones the campus was the next most important one (given by 55 per cent) (Figure 2.4).

The relatively small number of students from outside the South of England (numbering 245 in total, and mostly young in age) were more likely to be attracted by the campus environment and the subject choice than those from the South.

These findings have implications for the way the university projects itself to different groups of students, and markets itself

Figure 2.4: Reasons for choosing to study at Sussex University, by age



Source: IES/CDU Survey

to potential students, especially those in currently under-represented groups (*eg* older students).

Most (91 per cent) chose their actual course of study because of their interest in the subject, but one in three viewed the job opportunities that it offered as a factor of influence. The latter was of more importance to applied scientists (59 per cent gave this as a factor of influence) and especially engineering/ technology graduates (64 per cent).

2.5 Summary

The key characteristics of the sample were:

- ratio of men to women of 44:56
- mainly young, only 16 per cent were aged 21 or over at entry to degree courses
- predominantly white in terms of ethnic group (91 per cent)
- mainly from the South of England
- almost all had some work experience prior to entry to degree courses, including half with experience of a full time job, and ten per cent with at least five years prior work experience
- almost all had traditional entry qualifications, few from the vocational route
- quality of intake was academically high
- slightly more BA than BSc/BEng graduates
- broad subject spread, but strong differentiation by gender.

The sample was not biased in any significant way due to variations in response rates from different groups. The main differences were: a slightly higher proportion of women and a slightly lower proportion of mature students in the sample compared to the graduate population.

Other findings of interest were that one in four were currently living locally (in East or West Sussex), a higher proportion than had been living there previously, which produced a net inflow into the locality. Location featured strongly as a reason for coming to the University of Sussex, as did subject preference and the campus environment. There was some variation by age in the reasons given for coming to the university, but less by home locality.

3. Career Patterns

One of the main aims of the survey was to investigate career progress of graduates. In this chapter we analyse the main career patterns, in particular the pathways to their current jobs. What do they look like? And how do they vary for different students? In the chapter which follows (Chapter 4), we look in more detail at the different kinds of activities which might have been undertaken at the different stages in an individual's career (*ie* periods of postgraduate study, unemployment, time out of the labour market and short-term employment).

This chapter focuses on the information provided by the graduates about activities they were engaged in at six monthly intervals following graduation. They were asked to categorise their labour market status at each point in time under five broad headings:

- **Permanent employment**, *ie* full-time and part-time jobs (under 16 hours per week) which were intended to last at least three months (including voluntary work, internship and training placements).
- **Short-term employment**, *ie* a temporary employee in a job which was intended to last less than three months.
- **Further study**, *ie* full- or part-time study or continuing education to further career and opportunities (*ie* MSc, PhD, PGCE).
- **Not available for employment**, *ie* none of the above nor looking for any of the above.
- **Unemployed**, *ie* not in work but seeking work.

By doing so, a sequential picture could be built up of career stages and the movement of graduates between them over the time period since graduation. For 1993 graduates this represented a period of 1.5 years, for 1992 graduates 2.5 years, and for 1991 graduates, 3.5 years.

Inevitably with a retrospective study of this kind, a source of possible error is the ability of individuals to recall events and experiences with accuracy. This should be borne in mind when reading this and subsequent chapters.

Firstly, we look at their labour market status at the six month, one year and 18 month stages for the entire cohort. We then compare current status with initial (six month) status for each cohort separately (as they have had different lengths of time in the labour market). Finally, we look at the key patterns over time for graduates from the different cohorts to identify the main kinds of early career patterns.

3.1 Background

Most of the data on graduate employment in the UK relate to initial destinations. All UK universities collect data annually on the first destinations of their graduates — previously known as the First Destinations Return (FDR) but now the HESA First Destinations Supplement (FDS). The first destinations statistics are based on an annual survey of all new graduates at 31 December (*ie* approximately six months after graduation). While these data cover a very large proportion of each year's graduate output (at least 80 per cent response), and provide a measure of labour market trends, they can only be a 'snapshot' of the employment situation at one period of time (AGCAS, 1993-95). The trend in recent years has been for fewer graduates to enter permanent employment straight away, more to experience initial unemployment or take temporary work, and more to go on to postgraduate study either as an alternative to unemployment or to improve their employment chances. The destination after just six months is therefore becoming a less reliable indicator of labour market success.

There have been few studies which have looked at graduates' employment status further than six months into their careers. Brennan, Lyons and McGeevor (1993) in a follow-up survey of 1982 and 1985 graduates with CNAA degrees, showed that the proportion gaining permanent employment increases as time passes, so that after two years only five per cent of the 1985 cohort were unemployed, compared to 14 per cent at the six month stage. Gregson and Taylor (1987) studied the progress of 1984 graduates who were initially unsuccessful in finding a job. By the end of 1985, almost 70 per cent of them had found employment and 15 per cent were taking further study. These studies also showed that significant numbers of graduates have a rather turbulent experience in the early stages of their careers, moving in and out of short-term jobs and periods of unemployment.

Do University of Sussex graduates follow this pattern? Or have the 1990s brought changes to these kinds of early career patterns? How do they vary by subject? Or gender, age or class of degree?

3.2 Initial destinations

For the sample as a whole, nearly two out of five of the graduates (39 per cent) were in permanent jobs, mostly full-time

Table 3.1: Employment status six months after graduating (percentages)

	1993	1992	1991	All
Permanent employment	38	36	41	39
Short-term employment	18	19	19	19
Further study	25	24	23	24
Not available	4	4	5	4
Unemployed	15	18	13	15
N	*318*	*231*	*470*	*1,019*

Source: IES/CDU Survey

ones, six months after graduating. A further 24 per cent were in further study. Gregson and Taylor defined these two groups, making up 63 per cent, as being 'successful' in labour market terms. It should be noted that this use of the term 'success' is a very crude measure because job suitability, satisfaction or quality (for instance, is it a graduate level job?) are being ignored. The other 37 per cent who were 'unsuccessful' included 19 per cent in short-term work and almost 15 per cent unemployed. If those who were not available for employment and not seeking it are removed, then we can see that overall, between 1991 and 1993, for every two Sussex first degree graduates who were 'successful' in the labour market there was one who was unsuccessful (Table 3.1).[1]

Looking more closely at the experiences of different years, we can see from Table 3.1 that 1992 was a more difficult year for graduates. Unemployment rose to 18 per cent, and the proportion gaining permanent work fell to 36 per cent. There was little change, however, in the other categories — short term employment stayed at 18 to 19 per cent and further study at 23 to 25 per cent across the years.

These 1992 results for University of Sussex graduates mirror the national picture, though national unemployment rates were lower than at Sussex in each of the years. 1992 was the year that graduate unemployment in the UK peaked at 13 per cent, and fewer graduates found permanent work than in earlier years. This was mainly as a result of cutbacks in graduate recruitment by the larger recruiters, due to the effects of the economic recession, which coincided with rising graduate output. It is worth noting that the class of 1992 graduates had entered

[1] *NB*: These six month figures are slightly different from those obtained from Sussex University's First Destinations Return for these years. Although the categories for the follow-up survey were closely matched to the FDR there were a number of slight discrepancies which would lead to different results. The questions were asked slightly differently in each survey. Also, the follow-up survey asked for retrospective information while the FDR focuses on the present. All these factors could explain any differences.

university in the boom years of the late 1980s and may not have been fully aware, early enough, of the changing labour market conditions. While demand was still depressed in 1993, the graduates that year are likely to have been more in tune with the difficulties they were likely to face. They had probably begun to widen their job search, start the process of finding a job earlier and possibly had lower expectations about what was a suitable job. The evidence on career planning from this survey, presented in Chapter 6, shows that there is an increasing trend between 1991 and 1993 for graduates to start first thinking about careers earlier.

At this six month stage, women were more 'successful' in the labour market than men. In particular, the unemployment rate for male graduates was much higher, at 19 per cent. There was also variation by subject. Engineering graduates whose numbers were comparatively small, were more successful in labour market terms than the much larger groups of social scientists and arts/humanities graduates. Unemployment was highest in the arts/humanities subject group (at 19 per cent) and lowest in engineering and biological sciences (12 per cent). Further study was more likely to have been taken up by physical science graduates than others (Table 3.2). Graduates with first or upper second class degrees were more 'successful' than lower class degree holders: over two thirds of those with firsts or upper seconds were in permanent jobs or further study compared to under 50 per cent of the others. There was little difference, however, in this respect between mature and younger graduates.

3.3 One year on

Six months later, that is one year after graduation, the position, on the whole, had improved for each cohort. More were in permanent work than at the six month stage, and fewer were unemployed (see Figure 3.1 and Table 3.3).

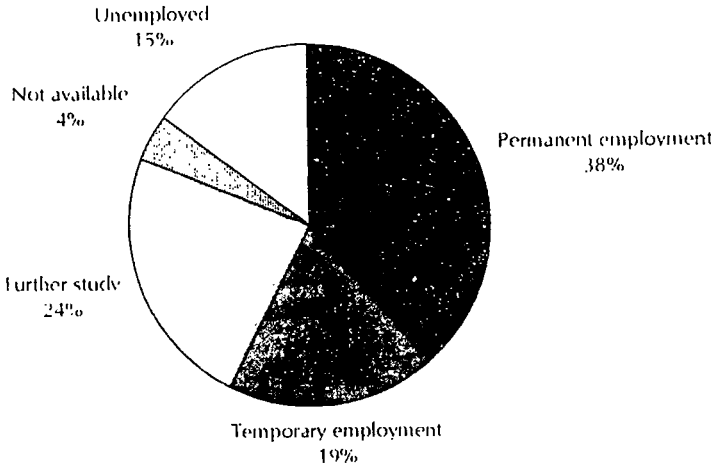
Table 3.2: Employment status six months after graduation, by subject (percentages)

Subject of degree	Permanent employment	Short-term employment	Further study	Unemployed	(N)
Biological sciences	38	19	29	12	(66)
Physical sciences	33	14	35	14	(69)
Mathematical sciences	40	18	22	17	(61)
Engineering/Technology	50	21	14	12	(43)
Social sciences	37	21	24	13	( )
Languages	43	18	22	13	( )
Other arts/humanities	40	20	18	19	( )

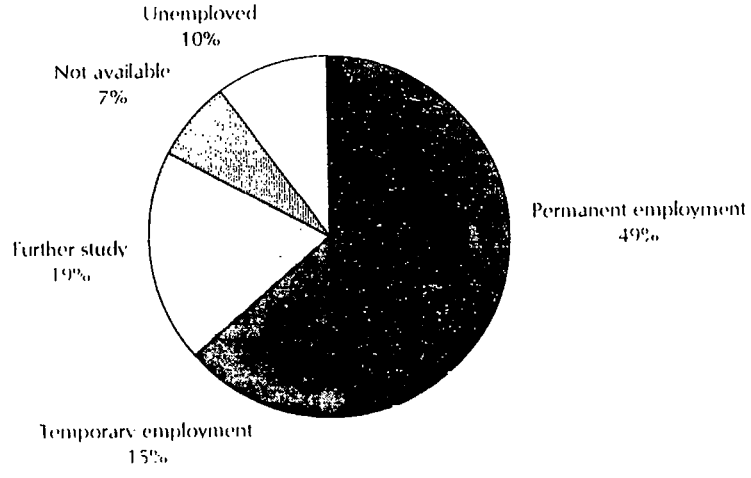
Source: IES/CDU Survey

Figure 3.1: Destinations of graduates after 6 months, 12 months and 18 months

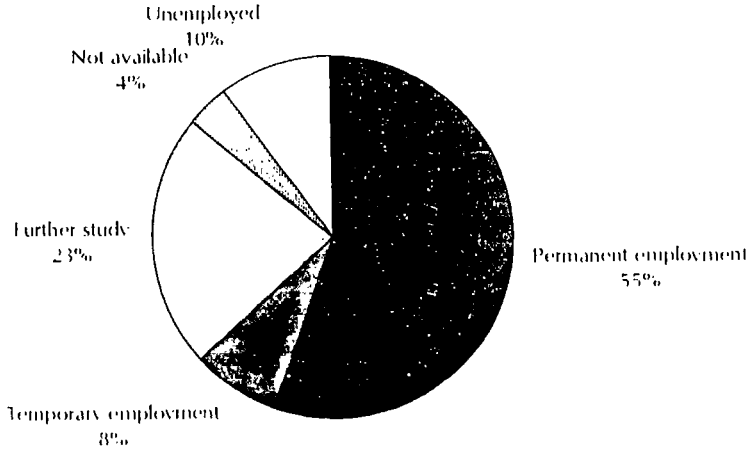
a) 6 months



b) 12 months



c) 18 months



Source: IES/CDU Survey

Table 3.3: Employment status 12 months after graduating (percentages)

	1993	1992	1991	All
Permanent employment	49	43	51	48
Short term employment	14	19	13	15
Further study	18	20	20	19
Not available	6	10	7	7
Unemployed	13	9	9	10
N	*317*	*230*	*468*	*1,015*

Source: IES/CDLI Survey

However, the 1992 cohort appeared still to be at a disadvantage in respect of their ability to gain permanent employment: only 43 per cent were in permanent employment at the 12 month stage, compared to 49 to 51 per cent for the other years. 1992 graduates were less likely to be unemployed by this time but they were more likely to be in short-term work. In fact, the proportion of 1992 graduates in short-term work had not changed between the six and 12 month stages, while it had reduced for the other two cohort years.

3.4 Eighteen months on

Eighteen months is the longest time period for which we can look at the whole sample. By then, the state of play was as follows:

- Over half (56 per cent) were in permanent jobs, compared to 39 per cent initially, an increase of 17 percentage points.
- 23 per cent were in further study, a similar proportion to that for initial destination.
- Eight per cent were in short term work, compared to 19 per cent initially.
- Ten per cent were unemployed, down from 15 per cent initially.
- Four per cent were taking time out, a similar proportion as found initially.

The pattern for each cohort is slightly different (Table 3.4.). A higher proportion of 1993 graduates were in permanent employment at the 18 month stage than of 1992 or 1991 graduates. This almost certainly reflects the improvements in the graduate labour market and in particular the increasing number of vacancies for new graduates by the end of 1994. However, 1993 graduates had a higher level of unemployment than 1992, and a lower percentage in postgraduate study. Being in short-term work was still more common for 1992 graduates than for either 1991 or 1993 graduates.

Table 3.4: Employment status 18 months after graduating

	1993	1992	1991	All
Permanent employment	61	52	54	56
Short term employment	8	11	6	8
Further study	17	25	26	23
Not available	3	5	4	4
Unemployed	12	7	10	10
N	*318*	*228*	*468*	*1,014*

Source: IES/CDU Survey

Table 3.5: Employment status six months and 18 months after graduating, analysed by gender (all years)

	six months		18 months	
	Male	Female	Male	Female
Permanent employment				
– full-time	33	35	53	50
– part-time	4	6	4	5
Short-time employment	16	20	7	8
Further study	24	24	20	25
Not available	4	5	4	4
Unemployed	19	11	12	9
N	*449*	*570*	*449*	*570*

Source: Source: IES/CDU Survey

Table 3.6: Employment status six months and 18 months after graduating, analysed by degree subject

	six months				18 months			
	P.S.	A.S.	S.S.	A	P.S.	A.S	S.S	A
Permanent employment	35	42	37	41	48	64	59	53
Short term employment	16	19	21	18	6	8	7	9
Further study	32	20	24	20	34	14	20	23
Not available	4	4	5	5	3	4	4	4
Unemployed	13	15	14	16	9	10	10	11
N	*238*	*216*	*301*	*264*	*238*	*215*	*300*	*261*

P.S. = Pure Science (Biological and Physical Sciences)
A.S. = Applied Science (Maths, Engineering/Technology)
S.S. = Social Science
A = Arts (Humanities, Languages, Creative Arts)

Source: IES/CDU Survey

Table 3.7: Employment status six months and 18 months after graduating, analysed by class of degree

	six months				18 months			
	1	2.1	2.2	3	1	2.1	2.2	3
Permanent employment	46	40	37	29	54	54	61	59
Short-term employment	8	16	24	26	6	6	9	8
Further study	35	27	18	18	35	26	15	17
Not available	6	4	5	1	4	3	5	1
Unemployed	6	12	17	26	2	10	11	15
N	*105*	*498*	*317*	*73*	*104*	*497*	*315*	*72*

Source: IES/CDLI Survey

By 18 months, there was less difference between some but not all graduates, than at the six month stage. The gap between men and women had narrowed, though women were still slightly more 'successful' (Table 3.5). Women were less likely to be unemployed than men, but more likely to be in further study. Differences between mature and younger graduates were also less noticeable by this stage (unemployment rate among mature and younger students was about the same, as was the percentage in permanent jobs.

By subject, unemployment rates were very similar at the 18 month stage, but pure science graduates were still much more likely to be in further study than the others (Table 3.6). Applied scientists, in particular the engineers, were more likely to be in permanent jobs. Class of degree was still a factor in labour market 'success', though less so than initially, as shown in Table 3.7. The employment pattern of those with first class degrees had altered little over the time period, probably because most of those who had initially taken up further study were still doing it (*ie* PhDs). The greatest change was among those with 2.2 or third class degrees, where the proportions in permanent employment had grown considerably at the expense of short-term work and unemployment, which had both reduced considerably.

3.5 Current status

At the time of the survey, December 1994, the 1991 graduates had been out in the labour market for over three years (42 months). The 1992 graduates had been out for less time (30 months) and the 1993 graduates for only 18 months.

Nearly two-thirds of the total sample were in permanent employment, an increase of 27 percentage points on the figure for the six month stage. A further seven per cent were in short-term jobs and 17 per cent were in further study. Only nine per cent were currently unemployed (Table 3.8).

Table 3.8: Current employment status

	1993	1992	1991	All
Permanent employment	61	59	72	66
Short-term employment	8	9	5	7
Further study	17	21	15	17
Not available	3	2	1	2
Unemployed	12	10	7	9
N	*317*	*230*	*467*	*1,014*

Source: IES/CDU Survey

Interestingly, further study still accounted for one in six of the total sample, with little level variation between the years. This shows the extent to which graduates are taking postgraduate studies in the years following graduation, not necessarily directly following on from first degrees.

The survey evidence also confirms that the likelihood of being unemployed decreases as time since graduation increases. Unemployment for 1991 graduates declined over the three years from 13 per cent at the end of 1991 to seven per cent by the end of 1994; for the 1992 cohort it declined from 18 per cent to ten per cent over two years; and for 1993 graduates from 15 to 12 per cent over the year. It also shows, however, that some unemployment exists up to four years after graduating. The seven per cent of 1991 graduates who were unemployed in 1994 were spread across the cohort and were not representative of particular groups of students. For example they included graduates from a range of subject groups, and with an age profile similar to the cohort as a whole.

Looking further at each of the cohorts and comparing current status with that at the six month stage we can see that for:

1991 graduates:

- 68 per cent of those who were unemployed at the six months stage were now in permanent jobs, and a further seven per cent were in short term jobs; nine per cent of them were (still/again) unemployed.
- Only one in three of the sample were in permanent jobs both at the six month stage and now.
- Those who were in permanent employment at the six month stage, however, had a greater likelihood of being in permanent employment now, than those with any other initial destination. Only 60 per cent of those who went initially to further study were now in permanent jobs. This compares with a higher figure of 81 per cent of those who went initially to permanent jobs.

1992 graduates:

For the 1992 graduates, who have had a year less in the labour market, the findings were as follows:

- 52 per cent who were unemployed at the six month stage were now in permanent jobs, and 12 per cent were in short term jobs; 12 per cent of them are (still/again) unemployed.
- Only one in four of the sample were in permanent jobs at the six month stage and now.
- As with the 1991 cohort, those in permanent employment at the six month stage were more likely to be in permanent employment now than any other group: only just over half of those who went to further study, and a similar proportion who were unemployed at the six month stage, were in permanent jobs now, compared to 68 per cent of those in permanent jobs at the six month stage.

1993 graduates:

The 1993 graduates have had the least time of all in the labour market since graduation (18 months). The improved labour market conditions appears to have had a mixed effect on their career patterns compared to the 1992 graduates:

- 57 per cent of those who were unemployed at the six month stage were now in permanent employment (compared to 53 per cent of the 1992 cohort, see above); none were in short-term jobs but 26 per cent were unemployed (compared to an equivalent figure of 12 per cent for the 1992 cohort).
- Almost 30 per cent had permanent jobs both at the six month stage and now.
- Those in permanent jobs at the six months stage were much more likely than other groups to be in permanent jobs currently (and more likely than the 1992 cohort). Only 43 per cent of the 1993 graduates who initially went on to further study were in permanent jobs a year later, compared to 76 per cent who had permanent jobs initially.

3.6 Career profiles

From the above, it is evident that initial experiences in the labour market have a determining influence on career progress, Although the majority of graduates eventually found jobs, those who initially gained permnanent work were more likely to be in that state at the time of the survey. Degree subject and class of degree are also influential on early career patterns, but as time goes by, the gap between graduates of different age and gender, and with different degree classes, appears to narrow. Some differences by subject remain, in particular the propensity to take further study, but unemployment rates are similar.

This analysis has compared graduates at different points in time in terms of labour market activity states, but it has not shown fully the extent of movement between these different states during their early careers. What proportion of graduates who gain jobs initially stay in employment throughout their early career, and how many move in and out of periods of employment, further study and unemployment? How varied are career patterns?

One way of systematically analysing careers is to describe the most common patterns of different labour market states. This was used by Dolton for analysing the six year work histories of 1980 graduates (Dolton and Makepeace, 1992). They found many different state orderings or career profiles (each state being a defined spell of time in: employment, further study, out of employment and unemployed) and restricted their analysis to the eight most common profiles.

In our dataset we asked about different points in time or time stages, and so each respondent provided information about a number of states or steps in their career which formed a career path. For the 1991 cohort there were seven states (at six month intervals), for the 1992, five states, and for 1991, three states. A great variety of paths was identified, with many different patterns existing. For the 458 graduates in the 1991 cohort we identified 242 different career paths, each path comprising a different permutation of the six possible labour market states at seven points in time.

3.6.1 Career changeability

We can look at career changeability or career turbulence by focusing on career changes rather than career states. Thus, for the 1991 cohort, the greatest possible number of career changes would be six. In order to simplify analysis, we first focused on the three most common career states: employed, further study, and unemployed.

Three-states

Looking just at these three states, the majority of graduates had very little turbulence in their careers. Almost two-thirds of the cohort had either a stable career with no state changes (35 per cent) or only one career state change (27 per cent). Looking at career turbulence for different groups of graduates, it was found that for most groups the most frequent number of career state changes was none. The exceptions were: physical scientists, languages graduates, and graduates with first class degrees where the most frequent number of career state changes was one change; humanities graduates where equal numbers had had both none and two career state changes, and biological scientists for whom two career state changes were most common.

Table 3.9: Career changeability of 1991 graduates (3-state), analysed by age of graduate percentages)

Number of career state changes	Mature	Younger	All
0	51	32	35
1	28	27	27
2	12	22	20
3 or more	9	20	18
N	*65*	*390*	*455*

Source:IES/CDU Survey

The number of career state changes for men and women was remarkably similar.

Mature graduates seemed to have much more stable careers. Over half of mature graduates had no change in their career states over the three and a half years since graduating, whilst only one-third of younger graduates had no career state changes. Almost twice as many younger graduates had two or more career state changes than mature graduates (Table 3.9).

Applied scientists (especially engineering/technology graduates) had the most stable careers, with almost half having no changes in career state over the measured periods since graduating. The most turbulent careers seemed to be those of social sciences and other arts graduates, and most especially languages graduates. Nearly a quarter of these arts graduates had three or more state changes during their careers (Table 3.10).

It seems that those graduates with higher degree classifications have less turbulent careers: 11 per cent of graduates with a first class degree had three or more career state changes compared to 18 per cent of lower seconds and 21 per cent of those with a third class degree or lower.

Table 3.10: Career changeability of 1991 graduates (3-state), analysed by subject of degree percentages)

Number of career state changes	Pure Science	Applied Science	Social Science	Other Arts
0	33	50	31	27
1	29	21	30	26
2	22	20	17	22
3 or more	16	9	22	25
N	*113*	*103*	*132*	*110*

Source:IES/CDU Survey

Four-states

We then split the 'employed' state into temporary and permanent employment, and focused on four career states (permanently employed, temporarily employed, further study, and unemployed). Not surprisingly, this increases the amount of career turbulence. The proportion of graduates with very little turbulence in their careers, one or no career changes, falls slightly to 55 per cent (compared with 62 per cent in the three-state analysis, of above).

For the applied scientists (mathematical sciences graduates and engineering/technology graduates), those with first class degrees, and mature graduates, the most frequent number of career state changes still remains none in this four-state analysis.

3.6.2 Career paths

A new variable was calculated to indicate the pattern of a graduate's career since graduating, showing which career states he or she has had, and in which order, and showing the changes between states. This new variable allowed easier analysis of graduates' career patterns by condensing continuous periods in any one particular state into one period.

Three career states (employed, further study, or unemployed), with condensation reduces the number of identified and unique career patterns for this cohort of 458 graduates from 242 to 58. The five most common of these condensed career patterns/ profiles were identified and are listed in Table 3.11. These five profiles account for almost two thirds (62 per cent) of the 1991 cohort.

Using path analysis we can pick up some differences in work histories between male and female graduates which were hidden in the career turbulence analysis (Table 3.12).

The top five profiles accounted for a very similar proportion of male and female graduates but the distribution within these five profiles differed slightly, especially with profile two (further study then employed) which was a more frequent path for

Table 3.11: Five most common condensed career profiles — (1991 graduates)

Profile	Path	%
1	Continuous employment	31
2	Further study then employment	11
3	Unemployed then continuously employed	7
4	Employed, then unemployed, then employed	7
5	Employed, then further study, then employed	6

Source:IES/CDU Survey

Table 3.12: Most common condensed profiles by gender (1991 graduates)

Profile	Male	Female
1	29	32
2	8	13
3	12	4
4	6	7
5	6	6
Cumulative %	61	62
N	*211*	*247*

Source:IES/CDU Survey

female graduates, and with profile three (unemployed then employed) which was three times more common for male graduates than female graduates.

This is likely to be explained by the greater propensity for women to go into post graduate teacher training (section 3).

Again, as with analysis of career changeability, mature graduates have less path variety and therefore less career turbulence (Table 3.13). Almost half of mature graduates in the 1991 cohort followed the profile of continuous employment (profile 1) compared to just over a quarter of younger graduates.

Continuous employment (profile 1) was the most common profile for applied scientists with almost one-half of this group following this pathway since graduating. Applied scientists had the least path variety: the five most common profiles for the 1991 cohort accounted for almost three quarters of this group of graduates. In comparison, career profiles (Table 3.14) show a more varied pattern for pure scientists and for social scientists.

A condensed analysis of graduates' career paths by their degree classification shows that the most popular path for each degree classification was profile 1, continuous employment (Table 3.15).

Table 3.13: Most common condensed three-state profiles by age (1991 graduates)

Profile	Mature	Younger
1	48	29
2	12	10
3	6	7
4	3	7
5	6	6
Cumulative %	75	60
N	65	*390*

Source:IES/CDU Survey

Table 3.14: Most common condensed profiles by subject of degree

Profile	Pure Science	Applied Science	Social Science	Other Arts
1	24	47	29	26
2	12	5	12	13
3	8	12	5	6
4	8	6	4	10
5	5	4	8	7
Cumulative %	57	73	58	62
N	*113*	*103*	*132*	*110*

Source:IES/CDU Survey

Table 3:15 Most common condensed profiles by degree classification.

Profile	1	2.1	2.2	3	Other
1	28	30	33	35	21
2	24	10	6	12	14
3	4	7	7	18	7
4	7	5	10	6	7
5	4	7	6	3	7
Cumulative %	67	59	62	74	57
N	*46*	*213*	*150*	*34*	*14*

Source:IES/CDU Survey

Table 3.16: Ten most common career profiles of 1991 graduates

Profile	Path	%
1	Continuous permanent employment	23
2	Further study then permanent employment	8
3	Temporary work then permanent work	7
4	Unemployed, then permanent employment	6
5	Continuous further study	4
6	Permanent work, study then back to permanent work	3
7	Permanent work, then further study	3
8	Permanent work, then unemployed, then permanent work	2
9	Study then unemployed then permanent work	2
10a	Temporary work, then unemployment, then permanent work	2
10b	Permanent work, unemployed, study, then permanent work	2

Source:IES/CDU Survey

Interestingly, this profile was slightly more prevalent amongst graduates with lower degree classifications (lower-second and third). Of those graduating in 1991 with a first class degree almost one-quarter followed the path of further study followed by employment (profile 2) — it was a much more popular route for this group than for any other. The profiles of three and four (unemployed then employed, and employed-unemployed-employed) were more common amongst the graduates with a lower degree classification.

Disaggregating employment into permanent employment and temporary employment introduces another state into the analysis. For the 1991 cohort, 117 different career patterns were produced, double the number of career patterns identified when permanent and temporary employment is combined into one state (see above). The five most common profiles have now changed and are listed below, along with the next five most common profiles.

Splitting employment into permanent employment and temporary work provides a more realistic and interesting illustration of the current situation of graduates careers. Interestingly, continuous permanent employment remains by far the most common profile.

As in Table 3.12, a greater proportion of female graduates than male follow the route of study, then permanent work (profile two), ten compared to six per cent. An exactly equal proportion of male graduates and female graduates, however, follow the path of temporary work to permanent work, profile three (seven per cent). The career turbulence is similar for both groups of graduates, with the ten most common profiles accounting for 61 and 60 per cent of each group.

For both mature graduates and the younger traditional graduates, the proportions following the route of temporary work to permanent work (profile 3) are very similar. The stability of mature graduates careers is again apparent.

While continuous permanent employment is the most common profile for graduates in more applied science than other subject groups, (profile 3) of temporary work into permanent work, is more common for applied science graduates (Table 3.17). Almost one-tenth of pure science graduates followed the path of continuous further study (profile 5), far more than other graduates.

From Table 3.18, it can be seen that the proportion of graduates following the continuous permanent employment route falls as degree classification falls, but the proportion following the route of temporary work into permanent work (profile three) (and also temporary to permanent work via unemployment — profile 10a) increases as degree class falls. This way into permanent

Table 3.17: Common four-state profiles by first degree subject studied

Profile	Pure Science	Applied Science	Social Science	Other Arts
1	19	36	19	18
2	10	4	11	6
3	4	11	8	5
4	7	10	4	4
5	9	3	2	1
6	4	2	3	4
7	6	1	2	1
8	2	3	2	4
9	1	2	5	0
10a	3	0	1	4
10b	0	0	1	6
Cumulative %	64	71	57	52
N	*113*	*103*	*132*	*110*

Source:IES/CDU Survey

employment is more important to graduates with a lower degree classification, and contrasts with the findings in Table 3.15, illustrating the importance of identifying temporary within permanent employment in this career pattern analysis.

Table 3.18: Common four-state career profiles by class of degree

Profile	1	2.1	2.2	3	Other
1	26	24	21	18	8
2	17	8	4	12	14
3	2	3	10	18	14
4	4	6	5	15	7
5	2	6	1	0	0
6	2	3	3	0	7
7	4	2	3	0	0
8	4	2	3	3	0
9	2	2	2	3	0
10a	0	1	3	3	0
10b	0	4	0	0	0
Cumulative %	65	62	55	71	50
N	*46*	*213*	*150*	*34*	*14*

Source:IES/CDU Survey

Table 3.19: Common profiles involving a stage in temporary employment

Profile	Path	%	%
1	Temporary work, then permanent work	20	7
2	Temporary work, then unemployed, then permanent work	5	2
3	Further study followed by temporary work then permanent work	5	2
4	Temporary work, then further study, then permanent work	4	1
5	Out of work, then in temporary work, then permanent work	3	1
N		*156*	*458*

Source:IES/CDU Survey

3.6.3 Temporary employment

Of the 458 graduates of the 1991 cohort, just over one third spent at least one measured period in temporary employment. The most popular paths of graduates with such experience employed career state are listed in Table 3.19.

It is interesting to compare the findings in Table 3.19 with those in Table 3.16. A greater proportion of those with a temporary work state in their career profile have a more turbulent career compared to the cohort as a whole. Furthermore, almost half of those with a temporary state experienced three or more career state changes during their careers to date, whereas only a quarter of the cohort as a whole experienced three or more changes.

3.6.4 Graduates with complex career paths

When concentrating on four-state career state analysis, (as discussed in paragraph 3.6.1), one-quarter of the cohort of 1991 graduates (110 graduates) had a career profile involving at least three changes in career status. This group tended to be younger graduates with second class honours degrees in arts or social science subjects. For the majority, almost two thirds, their final career status — after three and a half years — was permanent employment. However, those with less complex paths (fewer than three changes) had a much higher proportion ending up in permanent employment (76 per cent). The proportion of 1991 graduates ending their measured careers in further study was similar, whether graduates had more or less complex career profiles. A much greater proportion of graduates with complex career profiles ended their measured careers either in temporary employment (13 per cent) or unemployment (14 per cent) than their counterparts with less complex career profiles (two and six per cent respectively) (see Table 3.20).

3.6.5 Graduates with less common career profiles

The 277 graduates following the ten most common career profiles tended to have fewer career status changes, and thus less career

Table 3.20: Comparing the ultimate career status of those with complex and non-complex career profile percentages

Ultimate status	more complex careers	less complex careers
permanent employment	59	76
further study	15	15
unemployed	14	6
temporary employment	13	2
N	*110*	*348*

Source:IES/CDU Survey

turbulence, than those following the least common career profiles (181 graduates). Well over half of graduates following the least common career profiles had at least three changes in career status, and another 30 per cent had had two changes.

3.7 Summary

This chapter has discussed the early career patterns of graduates. In particular, it has shown the diversity of career paths that individuals follow and the differences between graduates in terms of labour market outcomes after a number of years.

There was evidence of a clear improvement in employment prospects as time passed. Eighteen months after graduation, over half of the graduates were in permanent jobs, compared with 39 per cent at the six month stage. Similarly, unemployment had dropped from 15 to ten per cent by the 18 month stage. Differences in the employment outcomes of different types of graduates became less noticeable after 18 months or more, especially between men and women, mature and younger graduates and those with different classes of degrees (with the exception of first class holders). Some differences between subjects, however, were still apparent, in particular the propensity to take further study.

For the 1991 cohort, the unemployment rate three years after graduation had dropped from an initial 13 to seven per cent, and two out of three graduates who were unemployed initially were in permanent jobs. The 1991 graduates who had been able to secure employment initially were more likely to be in employment three years later. This pattern was repeated for all the cohorts, indicating the importance to an individual's subsequent career progress of getting work (even temporary work) in the first six months.

It is almost impossible to identify typical career profiles, because of the variety of paths individuals follow. Several hundred different patterns of movements between various career states could be identified over the first three years or so. Overall, the

majority of graduates had very little turbulence in their early careers. Mature graduates had less changeability than younger graduates. The most turbulent careers were of social science and other arts graduates. The most common condensed career profile was 'continuous employment' but this accounted for only 31 per cent of the 1991 cohort. Male and female graduates tended to have slightly different career profiles. Graduates from applied sciences were more likely to have early careers comprising continuous employment and have less career path variety than graduates from other subjects. Following the route of temporary work into permanent work was more important to graduates with lower class degrees.

4. Labour Market Experiences

As has been seen in the previous chapter, the majority of graduates do not experience continuous employment in the first few years after graduation but follow a variety of career paths involving periods in and out of employment, in and out of further study and in and out of the labour market. Their careers are a series of different labour market states — jobs, both permanent and short-term or temporary ones, periods of further study (*eg* postgraduate courses, research, professional training), unemployment, and time out of the labour market (for health, family, travel or other reasons). In this chapter we look in more depth at their experiences in these different types of labour market states.

4.1 Jobs

Most graduates had held at least one job since leaving university. Over 80 per cent had experience of at least one permanent job, and almost half had held at least one short term job (defined in the survey as less than three months duration).

Permanent jobs

Of the 834 graduates who had experience of a permanent job (80 per cent of the total sample), almost all (82 per cent) were currently in permanent work. Two out of three had been in this state for more than a year, and one in five for more than two and a half years. (For a more detailed discussion about their current job see Chapter 5.) Forty per cent of those with permanent work experience had held at least two permanent jobs.

Some graduates (26 per cent) had spent their whole career to date in permanent work, while others had only recently obtained a job of this kind, and yet others had experienced periods in and out of permanent jobs (see section 3.6 for more detail on work history patterns).

The amount of time spent in permanent work varied, of course, for the different cohorts (see Table 4.1). Overall, just under half had experience of permanent work lasting more than 18 months in total. For the 1993 cohort, who had approximately 18 months in the labour market since graduation, 72 per cent had experienced a period of permanent employment, and of them, 41

Table 4.1: Time spent in permanent work (percentages), by year of graduation

	1993	1992	1991	All
For up to (& inc.) 6 months	31	11	7	14
7 to 12 months	28	21	9	17
13 to 18 months	41	25	15	24
19 to 24 months	–	19	11	10
25 to 30 months	–	24	20	15
31 to 36 months	–	–	16	8
37 to 42 months	–	–	23	12
N	*226*	*170*	*407*	*803*

Source: IES/CDU Survey

per cent had experienced more than 12 months in permanent employment (*ie* almost one third of the total cohort).

For the 1992 cohort, who had approximately two and a half years out, slightly more (77 per cent) had experienced a permanent job. Of these, 24 per cent had experienced more than two years in permanent employment (*ie* almost one in five of the cohort).

For the 1991 cohort, who had three and a half years out, 90 per cent had experienced a permanent job, and of them, 22 per cent had experienced more than three years in total in permanent employment (*ie* about one in five of the total cohort).

There was no significant difference between male and female graduates in the likelihood that they had experienced permanent employment, nor between broad subject categories. Mature graduates were slightly less likely than their younger counterparts to have experienced permanent employment (75 compared to 83 per cent). Within subjects, engineering had by far the highest proportion of graduates with permanent work experience (90 per cent) and biological sciences the lowest (74 per cent). The latter is likely to be associated with the greater propensity for scientists to enter postgraduate study.

Work experience prior to university made little or no difference, but work experience during study did. More of those who worked at some time during their degree study had experienced permanent employment since graduation than those who had not (83 per cent compared to 68 per cent).

Across all the years, on average 43 per cent (of the total sample) had gained a permanent job within six months of graduation. This represented over half of those with experience of permanent employment at some stage in their careers (see Table 4.2). By 12 months, 57 per cent had experienced a period of permanent employment, representing nearly three-quarters of all who had done so at some time after graduation.

Table 4.2: First entered permanent work (percentages), by year of graduation

	1993	1992	1991	All
Within 6 months of graduating	59	51	53	54
7 to 12 months after graduating	20	18	16	18
13 to 18 months after graduating	21	17	9	14
19 to 24 months after graduating	–	7	8	6
25 to 30 months after graduating	–	7	7	5
31 to 36 months after graduating	–	–	3	2
37 to 42 months after graduating	–	–	3	2
Base	*229*	*169*	*417*	*815*

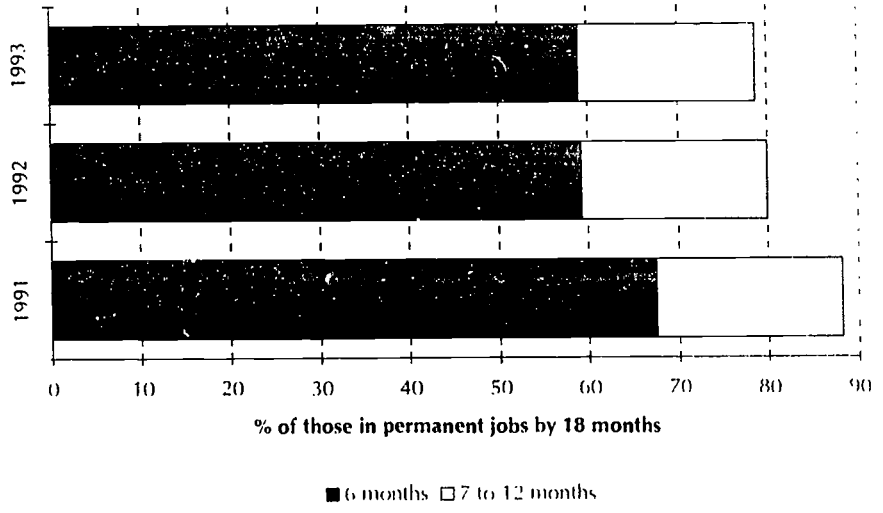
Source: IES/CDU Survey

The majority of graduates with permanent work experience were still in their first permanent job (58 per cent). Thirty per cent had held two, and nine per cent had held three permanent jobs. For the 1991 cohort only, 50 per cent were still in their first permanent job (two and a half years after completing their degrees); 33 per cent had held two and 12 per cent three permanent jobs, which gives an indication of the lack of job change during the last few years.

Female graduates were slightly more likely than male graduates to have held more than one permanent job, as were arts graduates compared with engineers.

There is some evidence to suggest that graduates are taking longer to find their first permanent job (Figure 4.1). Of those who had entered permanent employment by the 18 month stage, more of the 1991 cohort were likely to have done so within the first six months than of the 1992 or 1993 cohorts.

Figure 4.1: First permanent job: per cent entering within 6 and 12 months



Source: IES/CDU Survey

Short-term work

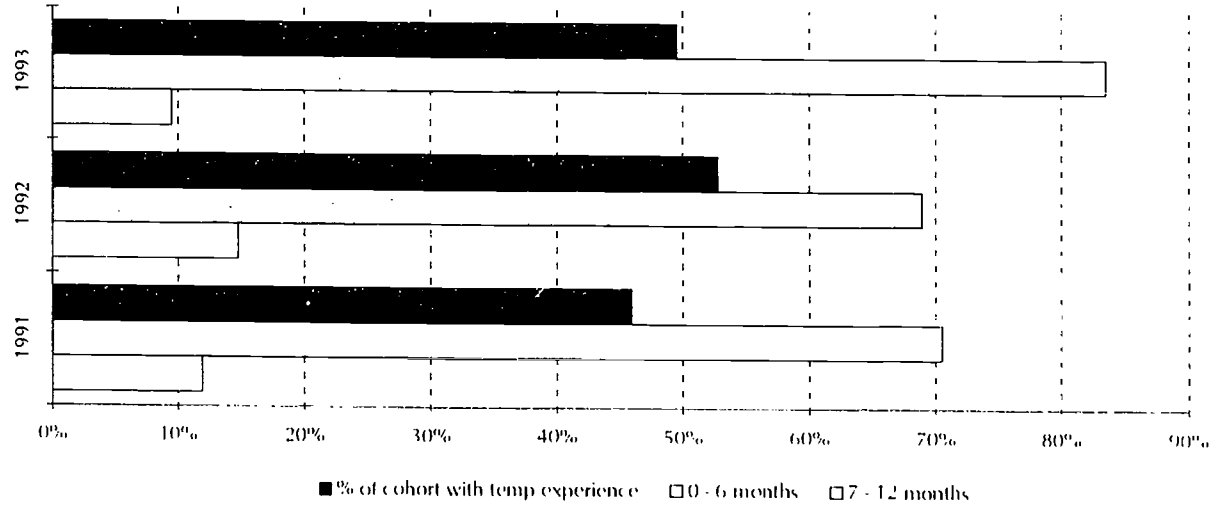
'Temping' or taking a short-term contract job is a growing trend in the graduate labour market, especially when permanent or more career orientated jobs are in shorter supply. In Chapter 3, there was no evidence presented to indicate whether or not short term work is on the increase for graduates from the University of Sussex. However, taking temporary employment is now a route into permanent employment for many graduates, especially for those who are less well qualified.

Overall, about one in five graduates were in short term jobs at the six month stage, and this percentage was similar for the different years. As time went by, the percentage in short term jobs declined, but the 1992 cohort were more likely to be in short term jobs at the 12 month and 18 month stages than were either of 1991 or 1993 graduate cohorts.

Overall, almost half of the sample had experience of short-term or temporary work (504 graduates) but, for most, this was for a relatively short duration and likely to have occurred early on in their careers. Most of them (85 per cent) had been employed in this way for less than 12 months in total duration, and 40 per cent for less than three months in total. Three-quarters had first taken short term employment within six months of graduating, one-half within two months and one-quarter immediately after they graduated. Thus, 36 per cent of the whole cohort had experienced some short-term working within the first six months of graduating, including 12 per cent immediately afterwards.

The 1992 cohort were more likely to have experience of a short-term job — 53 per cent had, compared to 46 per cent for 1991 and 49 per cent for 1993. But it was the 1993 cohort who were

Figure 4.2: First short term job: per cent with experience of short-term employment, and the per cent of those gaining it within six months and within 12 months



Source: IES/CDU Survey

more likely to have taken short-term jobs within the first six months: over 80 per cent did so compared to 69 and 71 per cent of 1992 and 1991 graduates. This provides evidence that short-term work is increasingly prevalent within the first few months of graduation, though not necessarily overall. In the six months following, the proportion entering short-term work for the first time dropped considerably, to only 12 per cent overall. This steep decline is visible for all years, but particularly for the 1993 graduates where it falls to ten per cent in the following six months. This increasing tendency to take a short-term job directly after graduation may be linked to student finance. Increasingly, students are leaving university in debt and many wish to pay this off relatively quickly. As shown below, the main reason for taking up a short-term job was because they needed the money (Table 4.3).

More female graduates took short-term employment than male graduates, 52 compared to 46 per cent, and more from humanities did so than from engineering. The latter probably reflects the greater availability of permanent jobs specifically for engineers than for other specialists. Overall, female graduates were slightly more likely than males to take up their first period of short-term employment within the first six months (76 compared to 72 per cent).

There was a range of types of short-term jobs, though the majority were at lower skill levels. Clerical and secretarial jobs represented one-third of the total jobs reported, but one in six were professional/managerial level, including 14 per cent which could be classified as professional (*eg* scientist, software engineer). Almost two-thirds of the graduates who had experience of short-term jobs had held a short-term clerical or secretarial job; a quarter had held a short-term 'professional' job.

Most of these short-term jobs were in the services sector — 23 per cent were in hotel, catering and distribution, 18 per cent in financial services, and 43 per cent in other services (mainly public services, but also community and leisure). Only seven per cent were in manufacturing or engineering.

Table 4.3: Why do graduates take short-term work?

Reasons for taking temporary work	% answering question
Needed the money	85
Could not find a permanent job	59
To get work experience	41
Interested in the work	28
Thought it may lead to a permanent job	23
Family reasons	4
Number in short-term work	*502*

Source: IES/CDU Survey

Graduates took a short-term job mainly for financial reasons — they needed the money: 85 per cent gave this as a reason for taking up short-term work, and as mentioned above, it is probably the main explanation of why the proportion taking short-term work is so high in the first few months after graduation. Others could not find a permanent job (59 per cent) or wanted to get work experience (41 per cent). Other reasons are shown in Table 4.3.

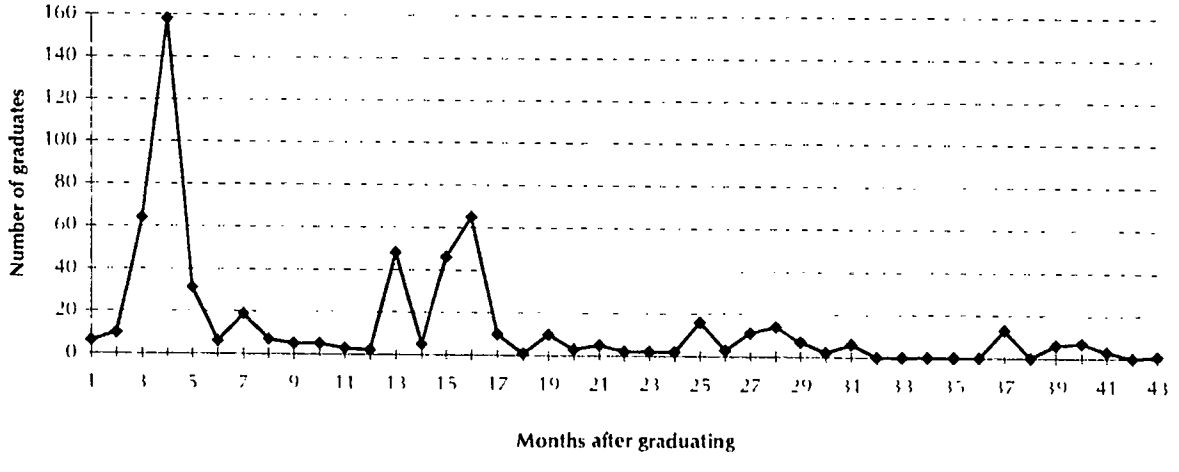
When these reasons are analysed by type of work it is evident that, while 'needing the money' featured strongly across all occupations, graduates who took a clerical/secretarial or sales job were more likely to do so (over 70 per cent of them) because they could not get a permanent job than those taking other types of short-term jobs. 'To get work experience' was more important for those in professional or associate professional/technical jobs: over 60 per cent did so compared to 41 per cent overall.

4.2 Further study

Going on to further study is a significant route for many graduates. While 62 per cent undertook further study at some time after their first degree, one in three of them (or 24 per cent of the total sample) were engaged in further study at the six months stage. Most (78 per cent) had experience of just one period of further study, 18 per cent had two, and a small number had three periods or more. The most popular time to undertake further study was within the first six months of graduating, half did so, and a quarter started within three months. There was another, but much smaller, peak in the 12 to 15 month period, when 27 per cent started a period of further study.

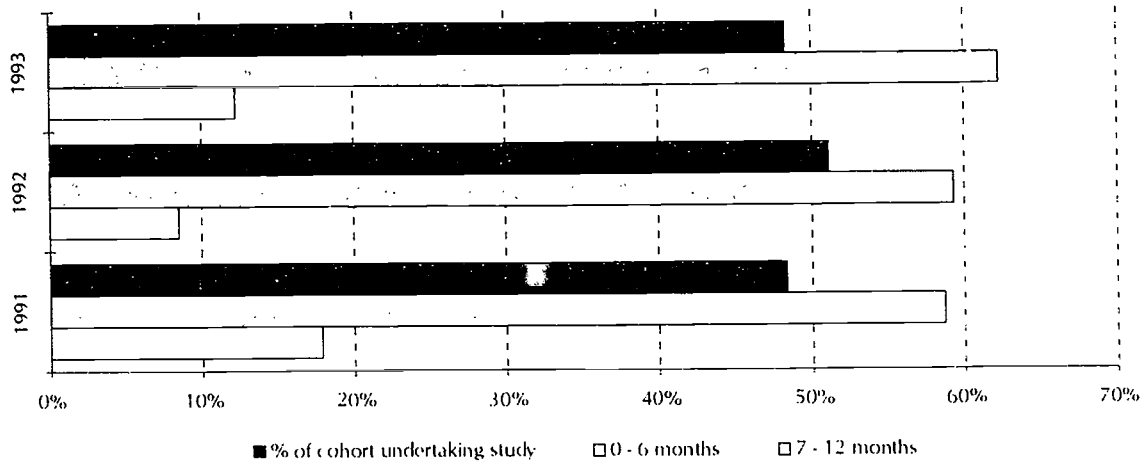
It was the 1992 cohort which exhibited the highest incidence of further study — 68 per cent had done so, compared to 66 per

Figure 4.3: Time first took up further study



Source: IES/CDU Survey

Figure 4.4: Further study (within 18 months): per cent undertaking further study, and the proportion of these undertaking it within six months and within 12 months of graduation



Source: IES/CDU Survey

cent of 1991 and 51 per cent of 1993 graduates. This is likely to be explained by the dual effects of the increasing demand for postgraduate study and a lack of alternative job options, evident especially in 1992. Looking across the cohorts, there is an increasing trend to take further study at an early stage in careers: 62 per cent of the 1993 cohort who did further study within 18 months of graduation had first taken it within the first six months, compared with equivalent figures of 59 and 56 per cent for the 1992 and 1991 cohorts respectively (Figure 4.4).

Significantly more females than males engaged in further study during their careers, 68 compared to 54 per cent. This is mainly due to the higher proportion of women doing postgraduate teacher training (see below). Age seems to have little bearing on participation in further study. Subject of first degree is more influential, with some subjects such as biological sciences, social sciences and humanities producing high participation rates. This is associated with the higher proportions of women in these subject areas.

The most popular subject for (first period of) further study among female graduates was education (mainly teacher training), while among men it was mathematical sciences (mainly IT). In education, women accounted for nearly 72 per cent of students taking this subject in further study; in mathematical sciences men accounted for 63 per cent of the total. The most popular subject for women was social sciences but for men it was physical sciences.

The highest level of qualification taken was a doctorate qualification; 18 per cent had studied for this (equivalent to ten per cent of the entire sample). A further 31 per cent had taken a masters, 24 per cent a postgraduate diploma and 14 per cent a

Table 4.4: Highest level of further study for each cohort, by year of graduation

Highest level of further study	1993	1992	1991	All
Masters	43	27	27	31
Postgraduate diploma	20	26	25	24
Doctorate	11	17	21	18
PGCE	13	13	14	14
Other	11	12	6	8
Vocational qualification	3	5	7	6
N	*152*	*151*	*305*	*608*

Source:IES/CDU Survey

PGCE. Women were more likely to have studied for postgraduate diplomas, PGCEs and other vocational qualifications, while men were more likely to have studied for a masters or doctorate qualification. Comparing cohort years, the percentage in the 1993 cohort that had engaged in academic study was higher than in 1991 or 1992. The percentage engaged in doctorate study was higher for the older cohorts, while the proportion engaged in masters was lower (some masters will have been upgraded into doctorates). Vocational qualifications also increased in importance over time (Table 4.4). This is also likely to be time related, as these types of qualifications are unlikely to be gained within the first year after graduation.

By subject of first degree, engineers were least likely to have engaged in further study at some time in their careers. However, those that did so were most likely to have gained a Masters qualification (64 per cent). Doctorates were more likely to be gained by physical science graduates (45 per cent), and PG diplomas by social scientists (40 per cent). PGCEs were more common among graduates from mathematical sciences (21 per cent).

A quarter of the graduates undertook their further study in the Sussex area, and a further quarter in the Greater London area. Nearly two out of three periods of further study took place at a university (including former polytechnics). Graduates were most likely to gain their first postgraduate qualification at a university (65 per cent did so) but this percentage reduces with subsequent qualifications.

Overall, the majority of the graduates took further study to enhance general or particular career prospects, or to follow a personal interest. These three reasons were mentioned by 63 and 55 per cent respectively, well ahead of any other reason for the sample as a whole. However, for those who had taken a PGCE, gaining a formal entry requirement was the main reason given (by 96 per cent of them). This was also important to those who had studied for a postgraduate diploma (62 per cent gave formal entry requirement as a reason). By contrast, enhancing particular

career prospects and following a personal interest were more likely to be the main reasons for those who had studied for a masters or doctorate (given by over 70 per cent).

4.3 Time out

Taking time out of the labour market, and therefore not available for employment, was reported by a relatively small proportion of the sample. Overall, 33 per cent had taken time out at some time, to pursue travel or leisure activities (63 per cent of them), to await the start of a job or course (39 per cent), for health or family reasons (11 per cent) or for a variety of other reasons.

One in three of those graduates who had taken time out had done so in the month after graduation, and 71 per cent within the first six months. More of the 1993 graduates had taken time out (81 per cent) in the first six months, than had the earlier cohorts. Taking time out diminishes with time. Only ten per cent of the 1991 cohort had first taken time out in the last two years (*ie* in 1993 or 1994) compared with 85 per cent who had done so in the first year after graduation.

Taking time out to travel or to pursue leisure activities declined across the cohort years, with only 57 per cent of 1993 graduates giving this as a reason, compared with 64 per cent for 1991 graduates. Health related reasons were more important for the 1993 cohort (11 per cent of them gave this as a reason, over twice that of the previous years).

4.4 Unemployment

Over half the sample, 54 per cent or 554 graduates in all, had experienced some unemployment since completing their first degrees, that is they had been looking for work but been unable to secure any at some point in time. There was little difference between cohorts, despite the different elapsed time.

The total time spent unemployed ranged from zero (46 per cent had never been unemployed) to the entire time since completing their first degree (but only for six graduates, less than one per cent of the entire sample). In between these extremes were 34 per cent who had been unemployed for a period of not more than six months in total.

Three quarters of those who had experienced unemployment did so within the first six months after graduation, and 86 per cent within the first year. This includes one quarter who were unemployed virtually straight away and one third who were unemployed within the first month. Comparing cohorts, the likelihood of being unemployed within the first six months of graduation increased between 1991 and 1992 (Table 4.5).

Table 4.5: When those experiencing unemployment first became unemployed (per cent)

Proportion of all those experiencing unemployment	1993	1992	1991	All
within 6 months of graduating	82	76	68	74
7 to 12 months after graduating	10	8	14	12
13 to 17 months after graduating	8	8	7	8
19 to 24 months after graduating	–	3	6	3
25 to 30 months after graduating	–	4	3	2
31 to 36 months after graduating	–	–	2	1
37 to 42 months after graduating	–	–	1	*
N	*167*	*120*	*247*	*534*

Source: IES/CDU Survey

As mentioned in the previous chapter, graduates with lower class degrees were more likely to experience unemployment initially and also subsequently. The main difference is between first and third class degree holders, with the latter being twice as likely as the former to be unemployed at some time. Subject differences were less evident, with the exception of engineering graduates who were much less likely to have experienced any unemployment.

The graduates were asked about the kinds of jobs they sought when they were unemployed and what type of work they were prepared to take. Most (87 per cent) looked for full-time work. Half looked for short-term appointments, one-third for part-time jobs and one-fifth freelance work (*nb*: they were asked about each period of unemployment). Almost one-third were only seeking permanent full-time jobs, but a quarter were prepared to also work part time or in temporary jobs, and one in eight said they would do any type of work. More of the 1993 cohort were looking for a wider range of types of jobs.

Sixty per cent of graduates who had been unemployed said that they would have worked in any job (that they were capable of doing) and 58 per cent said that they would work in any type of organisation. Graduates tended to be less flexible about geographical location: only 46 per cent would have worked in any area of the country. As might be expected, male graduates were more flexible geographically than female graduates, who were more likely to be married or have family commitments that restricted their mobility.

Factors which the unemployed graduates considered had hindered them in their search for a suitable job are shown in Table 4.6. Of most significance overall was their lack of relevant experience (given by 40 per cent) and the recession (30 per cent). A lack of relevant skills was of greater importance for the graduates of 1992 and 1993. By contrast, the recession was more likely to be given as the reason by 1991 than 1993 graduates.

Table 4.6: Reasons behind unemployment: percentage giving each as a factor which hindered their search for a suitable job

Factors	%
Lack of relevant experience	40
Recession	30
Lack of suitable/appealing jobs	11
High competition	11
Under-qualified	10
Over-qualified	9
Lack of relevant skills	8
Indecision	6
Not knowing how to get started, where to look	6
Restricted geographical mobility	6
Lack of motivation	5
Low degree class	5
Looking for specific jobs	5
Lack of job-getting skills/tools	4
Lack of confidence	2
Number giving reasons for their unemployment	*100*

Note: % of those answering the question

Source: IES/CDU Survey

1993 graduates were more likely than 1991 graduates to criticise the lack of suitable/appealing jobs, while more of the 1992 graduates commented on being over-qualified.

4.5 Summary

This chapter has provided further insight into early career patterns of graduates by looking in turn at the different labour market activities which graduates engage in.

Permanent employment

- 72 per cent of the 1993 cohort and 90 per cent of the 1991 cohort had experienced at least one period of permanent employment (by the end of 1994).
- 43 per cent (of the total sample) had gained their first permanent job within six months of completing their degrees.
- The 1993 cohort entered permanent employment more quickly than earlier cohorts.
- Half of the 1991 cohort were still in their first permanent job.

Short-term jobs

- Short-term or temporary employment working is much more likely to happen early in careers, and this pattern was more noticeable for the 1993 cohort.
- Short-term jobs range widely but a third of those reported were in the clerical/secretarial occupational category. A quarter of graduates who had experience of short-term work had done so in a 'professional level' job. Most were in the services sector.
- The main reason for taking a short-term job is financial; it is likely that the increasingly early take-up of short-term jobs is related to student indebtedness.

Further study

- Almost two out of three graduates engaged in further study at some time, and half of them first did so within the first six months after graduation.
- More female than male graduates engaged in further study, but this is linked to the higher proportion of women taking postgraduate teacher training.
- A quarter of the 1991 cohort had studied for a MSc and fifth for a PhD (by the end of 1994).
- Only a quarter had stayed in the Sussex area to do their further study.

Time out

- One in three had taken time out of the labour market at some time, most commonly within the first six months of graduating.
- The most common reason was to travel/pursue leisure activities.
- The 1993 cohort were more likely to take time out within the first six months than were other cohorts.
- 1993 graduates were more likely to do so for health reasons than other years.

Unemployment

- Only just over half of the sample had experienced unemployment, but 20 per cent had been unemployed for more than six months in total.
- Unemployment was most likely to have been experienced within the first six months of graduating; over half of those who had been unemployed had experienced it within the first month.

- Unemployed graduates had been more flexible about type of job and employer than geographical location.
- Lack of relevant experience and the effects of the recession were the main factors which had hindered them in their job search; the 1993 graduates were more likely to report a lack of relevant skills.

The chapter has also provided further evidence to show that the 1992 cohort experienced greater labour market disadvantage than either of the other two years. 1992 graduates were more likely to have held a short-term job and less likely to have obtained their first job within the first six months.

5. Current Job

The focus in this chapter and the next is on career outcomes to date. One of the aims of the survey was to get beyond looking at first destinations as an indicator of success in the labour market and investigate longer term job outcomes and career progress.

As has already been highlighted, the use of first destination data, especially crude employment or unemployment rates as measures of success can be misleading, and is an outdated and often overrated way of measuring a university's performance. Sussex University has a lower proportion of graduates entering permanent employment at the six month stage when compared with other UK universities, 43 per cent compared to 48 per cent for the UK average, for the years 1991 to 1993. But this is due to several factors, including its academic rather than vocational/ technical bias, its relative youth and its relatively high mature entry (see Johnes and Taylor, 1989, for an investigation of the factors that can cause variation between universities).

Recent trends in careers services and recruitment activities have suggested that graduates are taking longer to gain permanent employment than they did in the past. The survey evidence presented in the previous chapter confirms this (see Figure 4.1). Looking at the 18 month period following graduation, 68 per cent of the 1991 cohort compared to 59 per cent of the 1993 cohort had taken up their first permanent job within the first six months. The survey has also shown that, while 41 per cent of the 1991 cohort were in permanent jobs at the six month stage, this had risen to 52 per cent six months later and to 72 per cent by the time of the survey (late 1994, three years later). Consequently, any information about employment at the six month stage can look rather 'premature'.

Progress and longer term success in the labour market, as measured by employment status, occupation, salary, skill level, job satisfaction and other factors relating to a period some time after graduation, can also provide a more valuable insight into graduate employability and the complexity of graduate careers than the crude initial destination figures. (see for example, Brennan and McGeavor, 1993 and (Clarke, Rees and Meadows, 1988).

In this survey of Sussex University graduates, respondents were asked to provide details about their current job rather than their

initial employment. If not currently permanently employed, they were asked about their most significant permanent job since graduation. In all, 834 answered the questions about their current job (though not all gave responses to every question). They had all had experience of permanent jobs but only 681 (82 per cent of them) were currently in permanent jobs. The other 153 answered the question about their most significant recent job. Half of them were currently taking further study, and most of the remainder were unemployed or temporarily out of the labour market.

The focus of this chapter is the job itself, while the following chapter discusses how they got into the job, why they chose to take it and their satisfaction with it.

5.1 What type of jobs do graduates get?

Full- and part-time working

Almost all were in full-time jobs. Only seven per cent had part-time jobs (*ie* working for less than 16 hours per week). A few had jobs with variable hours, *eg* a nursing assistant, teacher, courier.

Part-time working may be on the increase as the 1993 cohort had a slightly higher part-time figure, at eight per cent. This is consistent with earlier findings in section 4.4 which showed that the 1993 unemployed graduates were more likely to look at a range of different types of jobs than just the traditional full-time permanent ones. More 1993 graduates were mature and this may also explain the difference. Overall, over twice as many mature students (13 per cent) than younger students (six per cent) were working part time. However, when the effect of more mature students in the 1993 cohort was controlled for, an increase in part-time working among 1993 graduates could still be identified.

There was no significant difference between men and women overall, but there was some variation by marital status and subject of degree. Not surprisingly, married graduates (many of whom were mature students) were more likely to be working part time. Three-quarters of those working part time were BA graduates, and they were twice as likely as BSc graduates to be working part time. The subject groups with the highest levels of part-time working were humanities and creative arts (14 per cent) and languages (seven per cent). By contrast none of the engineers and very few of those who had studied mathematical sciences were working part time.

The sectors with higher than average levels of part-time working were: higher and further education (HE/FE), printing and publishing and libraries/museums. The occupations were: welfare work, social research, TEFL teaching, HE/FE teaching, journalism, clerical and secretarial work, and personal and protective services.

Work placements

Although the importance of work or training placements (often known as internships) is increasing, and being developed as a means by which unemployed graduates can improve their employability, very few graduates in the survey (seven per cent) were currently in a work or training placement. This is partly due to timing as they are more likely to have taken a placement of this kind at a much earlier stage in their career. Most of those who were in placements were doing so as part of professional training. Although slightly more women than men, slightly more arts than science graduates and slightly more graduates with firsts or upper second class degrees were in placements, these differences are not significant.

Placements were more common in professional level occupations including the following: solicitors, psychologists, journalists, software engineers, design and development engineers, accountants and welfare work.

Self-employment

Only six per cent were self-employed. A slight upward trend was noticeable over the cohort years but not of any significance. This survey then does not provide much evidence to support the suggestion made in various reports (see for example *Highly Qualified People: Supply and Demand*, 1990) that self-employment of new graduates is likely to increase during the 1990s.

Men were more likely to be self-employed than women, as were mature graduates, but differences were not significant. The main difference was between BA and BSc graduates, the former being twice as likely to be self-employed (eight per cent) than the latter (four per cent). Degree subjects with the highest self-employment levels were humanities, creative arts, and languages.

Most of the self-employed graduates were in the services sector, in jobs which included software engineers, computer programmers, authors, journalists, musicians, trainers and managers/administrators.

Fixed-term contracts

Nearly one in three of the graduates had fixed-term contracts. These lasted for variable lengths of time. The most common were those of one year (28 per cent of them); but 26 per cent were for two years or more; and one quarter had a contract of less than six months.

1991 graduates had on average slightly longer contract lengths. Shortening contract lengths may be related to the effects of the recession or may be a longer term trend. The *CBI (1994)* take the view that the numbers of graduates working on a more flexible

basis for different organisations and on different contract arrangements will increase.

BA graduates were more likely than BSc graduates to be in fixed term contracts, and more likely to be in contracts of less than one year in length. Significantly more females than males were working on a contract basis, 37 per cent compared to 29 per cent. This is likely to be occupationally related. Contract working was more prevalent in childcare jobs, teaching and scientific work (mainly chemists), and among solicitors, accountants, psychologists, clerks, researchers and literary/artistic professions. Many of these occupations have an overrepresentation of women. Some of the researchers, solicitors, accountants and psychologists were working under training contracts.

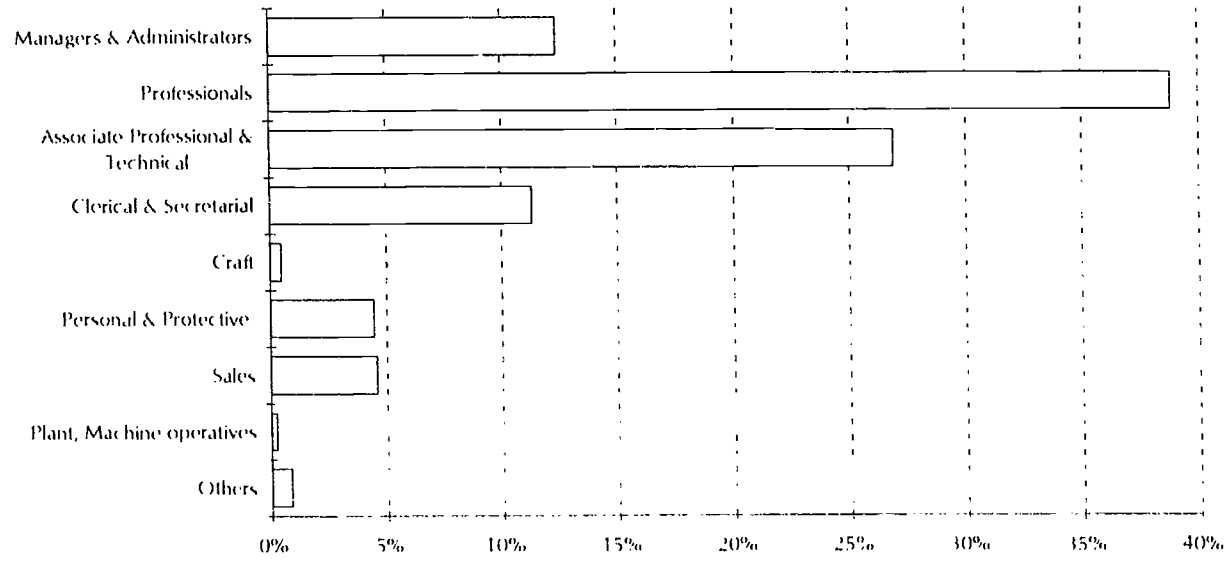
5.2 In which occupations?

Graduates were asked for their full job title and a brief job description. These two bits of information were then used to code the graduates' jobs against the set of Standard Occupational Classification (SOC) categories.

At the broad level, most graduates (78 per cent) were in the top three SOC categories: managerial/administrative, professional and associate professional/technical jobs. The largest of them, accounting for 39 per cent, was the professional group. The remaining 22 per cent were spread across a number of categories, as shown in Figure 5.1.

Looking more closely at the composition of the SOC groups, it can be seen that the most popular job group (at SOC level 2) was teaching, with 13 per cent of the graduates. Other popular job

Figure 5.1: Occupations of graduate



Source: IES/CDU Survey

groups included:

- engineers and technologists (eight per cent)
- associate professional/technical jobs (seven per cent)
- business and finance professionals (six per cent)
- literary, artistic and sports professionals (six per cent)
- natural scientists (five per cent).

No other occupation group had more than five per cent of the total, and the six most common groups identified above accounted for less than half of the total graduates. This is further evidence of how broad-ranging the occupations of graduates have become, although the majority are working broadly at professional/managerial level.

It is possible to disaggregate the SOC groups further to identify individual occupations. At this SOC level 3 classification, numbers become quite small and no single occupation had more than five per cent of the total. The ten most common jobs are shown below:

- secondary teacher (41 graduates)
- primary teacher (22)
- other teacher (26)
- clerical assistant (40)
- journalist/writer (38)
- computer analyst/programmer (32)
- software engineer (24)
- design/development engineer (25)
- natural scientist (20)
- welfare and social worker (26).

Various reports have highlighted the trend towards greater breadth and variety in the jobs which graduates take up and the employers which recruit them (see for example CBI, 1994, IES, 1994). This survey evidence provides further confirmation of this trend. The 1993 cohort were distributed across a wider range of jobs, and fewer were in professional level jobs than the 1991 or 1992 cohort (Table 5.1). Jobs held by 1993 graduates which were virtually absent from those held by earlier cohorts included:

- financial management, advertising, public relations management, restaurant management, charity official, town planner, environmental health officer, records clerk, storekeeper, playgroup leader, postal worker and porter.

Table 5.1: Occupation of graduates (SOC level 1) (per cent)

	1993	1992	1991	All
Managers and administrators	10	12	14	12
Professionals	29	37	45	39
Associate professors/technical	28	30	25	27
Clerical and secretarial	17	13	8	11
Sales	8	4	3	5
Personal and protective	6	3	4	4
Other	3	2	1	2
Number of respondents	*230*	*177*	*425*	*832*

Source:IES/CDU Survey

Others which were held by 1991 graduates but were more prevalent for the 1992 and 1993 respondents included:

- design and development engineering, accountancy, financial advisor, personnel officer, marketing officer, journalist, sales representative, financial clerk and teaching/education assistant.

And those which were less prevalent in 1992 or 1993 included:

- university lecturer, teacher, scientific work, solicitor, social worker and nurse.

The broadening of the latter are mainly jobs which are not usually taken up until after a postgraduate training period, and so would be expected to be less prevalent among more recent graduates.

As might be expected, male and female graduates exhibited different occupation profiles. Proportionately, slightly more male than female graduates were in the top three SOC level 1 categories, *ie* the professional/managerial/technical occupations traditionally associated with graduate entry. Differences were more marked in the other categories, in particular the secretarial and clerical and the sales ones (Table 5.2).

Predominantly female occupations were:

- biologist, teacher, solicitor, psychologist, nurse, personnel, and social worker

and predominantly male occupations were:

- marketing/sales management, computing management, office management, physicist, engineer/technologist, economist/ market researcher/statistician, management consultant, financial adviser and trader.

Table 5.2: Occupation of graduates (SOC level 1), by gender (per cent)

	Male	Female
Managers and administrators	12	13
Professionals	42	36
Associate Professors/technical	25	28
Clerical and secretarial	8	14
Sales	6	3
Personal and protective	3	6
Others	3	1

Source:IES/CDU Survey

This distribution is not surprising and results from a combination of factors including degree subject, gender stereotyping and social conditioning. Table 5.3 shows the differences by broad subject of degree. The highest proportions in the top three categories were found in engineering and mathematical sciences (89 and 88 per cent) and the lowest in humanities (69 per cent). Engineers and mathematical scientists were more occupationally concentrated than pure scientists and arts graduates.

5.3 Were they new jobs?

If the employment of graduates is broadening, are these new jobs which graduates are entering or are they jobs previously held by other less qualified entrants? The survey evidence suggests a bit of both.

One in three of the graduates described their job as a new job — that is it was a newly created position. Slightly less, 21 per cent said it had existed previously but had changed slightly (semi-new) and the remainder, almost half of the total, said it was an existing position (*ie* an 'old' job). However, of the latter, 22 per

Table 5.3: Occupation of graduates, (SOC level 1) by subject (per cent)

	Biol sci	Phys sci	Math sci	Eng/tech	Soc sci	Lang	Hum
Managers and administrators	7	8	11	4	18	14	12
Professionals	44	49	47	75	75	31	28
Associate professors/technical	23	18	30	11	28	36	30
Clerical and secretarial	10	9	5	4	11	17	23
Sales	8	9	3	6	4	2	1
Personal and protective	6	4	2	—	7	3	4
Other	1	1	1	—	2	—	3
Number	*84*	*97*	*133*	*47*	*260*	*126*	*78*

Source: IES/CDU Survey

cent knew that the previous incumbent had not been a graduate (*ie* around one in ten graduates had displaced a less qualified person).

The majority of new jobs (58 per cent) had been created because of company expansion and a further 21 per cent were known to have resulted from company restructuring. Only 13 per cent had been created because of changes in technology. Other reasons included: changes in management/markets/legislation, entirely new company, improved HR planning, new project, or contract work becoming permanent.

5.4 In which sectors?

Seventy per cent of the graduates were employed in the services division of the Standard Industrial Classification (SIC). This included:

- 20 per cent in financial services, including 14 per cent in business services
- 32 per cent in public services, including 20 per cent in education, seven per cent in national/local government and five per cent in health
- six per cent in social, welfare, charity and community organisations
- three per cent in R&D services, and
- three per cent in the arts/media (*ie* TV, music, theatre).

Fifteen per cent were employed by industry. Others were spread across the other divisions but none accounted for more than seven per cent of the sample.

Table 5.4: Sectors of graduates, jobs (per cent)

	1993	1992	1991	All
Services:				
– Banking, finance, insurance	21	25	17	20
– public and other services	43	50	54	50
Industry:				
– Engineering	5	3	6	5
– Chemicals/minerals	3	2	6	3
– Other manufacturing	11	8	5	7
Transport/communications	5	3	6	5
Distribution, hotel, catering	10	6	5	7
Other	2	3	1	2
N	*229*	*176*	*422*	*827*

Source:IES/CDU Survey

Cohort analysis shows that graduates are going to a wider range of jobs in terms of other sectoral distribution: more 1993 than 1991 graduates were in manufacturing and distribution/catering. Public services still dominated in 1993.

The financial services sector had proportionately more of the jobs which graduates described as 'new jobs' (see section 5.3). By contrast, public and other services, which as shown above is the dominant sector, had the smallest proportion of new jobs.

5.5 Geographical location

In earlier chapters it was shown that 25 per cent of the sample were currently living in Sussex and a further 50 per cent in the South of England.

Of those who gave details of their current job (or recent most significant one), 20 per cent were working in Sussex and the majority (two out of three) were in the South of England. The cohort analysis shows an increasing trend to be working locally. One quarter of the 1993 cohort were working in Sussex compared to one sixth of the 1991 and 1992 cohorts. There are several explanations for this: it may be evidence of a more local labour market developing for graduates, or it could relate to an increased tendency to stay locally for the first few years and then drift away later. A third possible explanation is that it relates to the higher proportions of students originating from the South in the later cohorts. Unfortunately, the data do not permit further analysis to identify more clearly the extent to which a stronger local labour market is developing, but this subject is worthy of further attention in future graduate follow-ups.

Over 20 per cent of the 'new jobs' were in Sussex, a similar proportion to all jobs, providing little evidence of substantial local job creation activity.

A small proportion were working abroad (13 per cent) and half of them were in the EU countries. Slightly more of the 1991 cohort were working in EU countries (eight per cent) than of the 1993 cohort (five per cent). This may again be due to the time factor with more going to work overseas after a few years, but it also confirms that there has not been a major exodus to Europe. This is in line with national trends which show that jobs abroad still attract comparatively few applicants from Britain. The main reasons are a lack of language skills, and the younger age and inexperience of British graduates compared to other Europeans.

5.6 Size of company

Much has been said (by Government, CBI and others) about the shift in the graduate labour market to small and medium sized enterprises (SMEs). More small firms are recruiting graduates

than in the past and the larger firms are taking a smaller share of the total. Sussex University has always had a stronger SME market than many other 'older' universities, and relied less on recruitment by large national firms. It is not surprising, therefore, to find from the survey that over two fifths of the graduates were working in companies that employed fewer than 200 employees. This included 15 per cent in very small firms (less than 20 employees). It should be noted, however, that large firms also featured: 30 per cent of the graduates were in very large firms (over 5,000 employees).

There has been some, though not a significant, shift towards SMEs over the last few years. The proportion from the 1991 cohort in small firms (less than 200 employees) was 39 per cent compared with 43 per cent for the 1993 cohort. However, employment in very large firms also increased, from 27 to 30 per cent. Looking at when they first obtained employment (for those with one job only) provides some further evidence: just over a quarter who obtained their first jobs in 1991 went into small firms compared to almost half who did so in 1994.

Almost half of all the jobs described by graduates as 'new jobs' (see section 5.3) were in SMEs, including almost one-fifth in very small firms (less than 20 employees). This is higher than for all jobs, indicating the importance of small firms in job creation. However, the role of very large firms (over 5,000 employees) should not be overlooked, as they accounted for a quarter of the 'new jobs' (Table 5.5).

5.7 Underemployment

There has been considerable debate about the extent to which graduates are obtaining jobs commensurate with their abilities (see Mason, 1994; Keep and Mayhew, 1995). As the numbers of graduates have increased and their labour market broadened, graduates are seen to be entering a wider range of jobs, including some which a decade ago would have been filled by 'A' level recruits. Earlier in this chapter, evidence was presented which showed that around one in ten of graduates were in a job which they knew had been previously held by a non-graduate.

Table 5.5: Where are the new jobs? (per cent)

Size of company (employees)	New	Old
Less than 20	19	11
20-199	27	28
200-999	18	18
1000-4999	13	13
5000 plus	24	29
N	*(244)*	*(296)*

Source: IES/CDU Survey

There are different interpretations of what is or is not a 'graduate level job' and no satisfactory measure of graduate under-employment. The traditional image of a graduate entering a graduate training programme in a large firm is no longer the norm. As has been seen earlier in this chapter, graduates are in a wide range of occupations, not all of which are traditionally thought of as jobs appropriate for people entering them with degree qualifications. Some of them may well feel under-employed because they are not fully utilising their skills, but then so may some graduates in professional/managerial level jobs which have been viewed traditionally as at the 'right' level.

The traditional way of measuring underemployment by matching level of job to qualifications is very crude. This is done in the United States in collecting labour statistics and in their college graduate surveys. It has also been used here, for example in the 1990 ED/DfE study on highly qualified people.

In the survey we attempted to gain a measure of under-employment by asking the graduates to classify their job against a number of statements which interpreted a graduate job in different ways. The ones we used were based on the various measures other researchers had used to classify graduate jobs (*eg* NIESR, DfEE, AGR, HELM study). We also asked them about their perceptions of being underemployed. These were subjective measures but ones we felt would be more useful than the more traditional ones based on occupational classifications.

The question about how the graduates viewed their jobs in relation to whether or not a degree was relevant produced some interesting results:

- 46 per cent said a degree was a formal entry requirement
- 43 per cent said the work required graduate ability
- 75 per cent said a degree was necessary or helpful
- 15 per cent said the previous postholder was a graduate
- 11 per cent entered via a graduate trainee programme
- 20 per cent said that none of these applied.

Thus, four out of five graduates were in jobs which could be broadly described as 'graduate level employment'. However, the main reason given was that a degree was helpful or necessary in getting their job, and less than half considered their work required graduate level ability.

This proportion in 'graduate level employment' is similar to that shown earlier using occupation as a measure (the traditional, more objective way of looking at this). The top three SOC categories — management/administrative, professional and associate professional/technical — accounted for 78 per cent of the graduates. Interestingly, 96 per cent of those in the

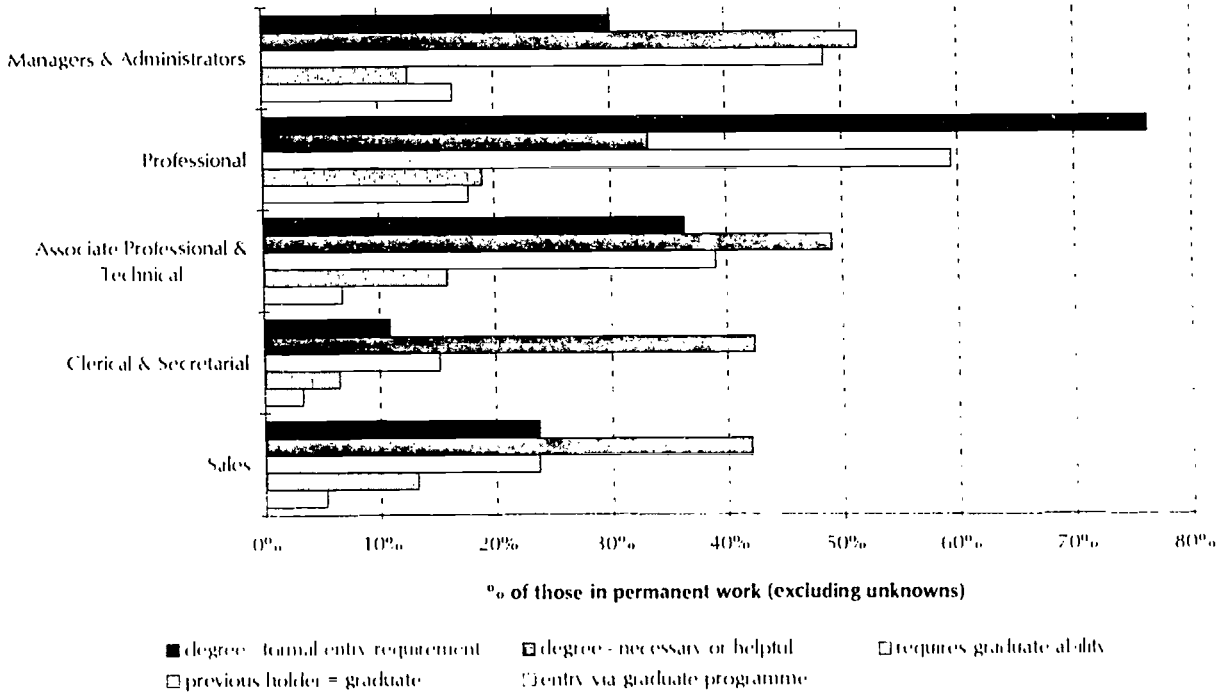
professional job category described their job as at graduate level when the classification above was used. The corresponding figures for the other two categories were 82 and 80 per cent. For the lowest two SOC categories, a lower proportion described their job as at graduate level (60 per cent of graduates in sales jobs and 50 per cent of those in secretarial and clerical posts.)

These findings show that the use of the top three SOC categories is of value as a proxy to defining graduate level employment but that using the category 'professional' exclusively is too narrow a definition. For example, only 61 per cent in 'professional' occupations said that their work required graduate ability. Conversely, the findings also show that there are a considerable numbers of jobs classified as lower level jobs which are in fact seen by the graduates as being at 'graduate level'. For example, 30 per cent of graduates in clerical and secretarial occupations said their work required graduate ability and 85 per cent found their degree helpful in getting it (Figure 5.2).

Analysis by cohort year showed a declining proportion in 'graduate level employment', down from 84 per cent in 1991 to 73 per cent in 1993. The main reduction was in the proportion of them who said that a degree was a formal requirement. In fact, there was a slight increase in those who found a degree helpful and who entered via a graduate trainee programme (Table 5.6). The latter partially relates to the age of the cohorts.

Class of degree appeared to be an explanatory factor — 92 per cent of first class graduates compared with 78 per cent of lower

Figure 5.2: Classification of graduate level jobs, by occupation



Source: IES/CDU Survey

Table 5.6: Classification of graduate level jobs, by cohort year (per cent)

	1993	1992	1991
Degree as a formal entry requirement	52	59	60
Work requires graduate level ability	51	50	56
Degree was helpful	55	51	50
Previous job holder was a graduate	18	20	18
Entry via a graduate programme	18	11	14
*Number of respondents**	*164*	*140*	*353*

* N= number who answered the question, ie were in graduate level employment.

Source: IES/CDU Survey

second or third class graduates were in graduate level employment. Similarly, age is relevant — 72 per cent of mature graduates compared with 81 per cent of younger ones were in graduate level employment. Having a BA or BSc made little difference and there was little difference between men and women.

When we then asked the graduates a question directly about whether or not they felt underemployed in their jobs, over half said that they did, including a quarter who felt very underemployed. As Table 5.7 shows, the perception of being underemployed may be growing: five per cent of the 1991 graduates felt underemployed compared with 66 per cent of 1993 graduates. This difference however, may relate more to elapsed time. More of the 1991 cohort would have left their first job by 1994 which may partly explain the difference. The finding that two-thirds of 1993 graduates felt underemployed just over a year after graduation must be of some concern, and warrants further investigation.

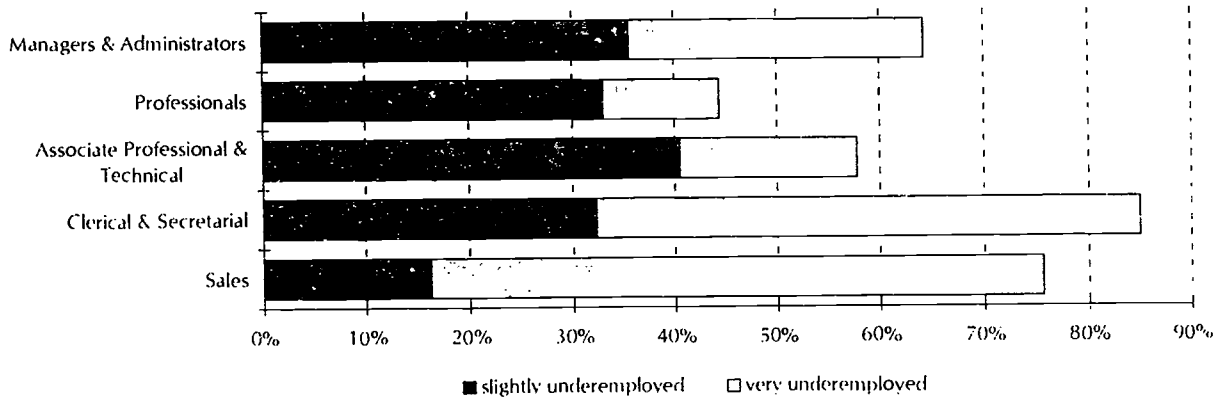
Just over half (53 per cent) of those in 'graduate level employment' (as defined above) felt underemployed, but most of them felt only slightly underemployed. This was in contrast to the graduates not in 'graduate level employment', where 83 per cent of them felt underemployed. Those who were more likely to feel underemployed included graduates with lower class degrees, mature graduates, arts and engineering graduates and those in larger organisations. By occupation, it was the

Table 5.7: Underemployed graduates (per cent)

Do you consider yourself to be underemployed?	1991	1992	1993	All
Not at all	45	38	36	41
Slightly	31	37	36	33
Very	24	25	29	26
Number	*422*	*167*	*228*	*817*

Source: IES/CDU Survey

Figure 5.3: Perceptions of being underemployed, by occupation



Source: IES/CDU Survey

graduates in clerical and secretarial work who were more likely to feel underemployed, 85 per cent did and 53 per cent felt very underemployed. By contrast, although 44 per cent of the professional occupational category felt underemployed, only 11 per cent felt very underemployed (Figure 5.3).

The sector with the highest level of underemployment was 'distribution, hotels and catering' where 80 per cent felt underemployed, and the majority of them felt very underemployed. The latter figure contrasted with around 20 per cent in the other sectors. Graduates employed in small organisations (under 20 employees) were less likely to feel underemployed (53 per cent) than those in larger ones (200 to 999 employees), at 68 per cent. One-third of graduates in very large organisations (over 1,000 employees) felt very underemployed.

There were several ways in which they felt underemployed, as Table 5.8 shows. The main ones were a lack of intellectual challenge, not using degree skills to the full, and feeling that they had more to offer (each given by over a quarter of those who felt underemployed), but others such as being held back and doing tasks requiring little skill were also given. 1993 graduates were more likely to cite the lack of challenge or

Table 5.8: Ways in which graduates felt underemployed (per cent)

	% of underemployed	% of very underemployed
Lack of intellectual challenge (boring, routine)	30	65
Not using degree or other skills to the full	27	48
Feel I have more to offer, want more involvement	27	40
Do tasks requiring little skill	22	67
Held back (by organisation/management)	13	67
N	482	212
Not being developed (no long term element)	9	54

Source: IES/CDU Survey

routine nature of their job, while more of the 1991 graduates felt they had more to offer or wanted more involvement than they were allowed. Not surprisingly, it was the graduates in clerical and secretarial jobs who were more likely to feel underemployed because of the lack of challenge in their work (47 per cent gave this as a factor). Those in professional occupations were more likely to feel underemployed because they were not using their skills to the full or had more to offer (almost 30 per cent gave each of these factors) and less likely to criticise the lack of challenge in their work (22 per cent did). By contrast, in the 'distribution, hotel and catering' sector the causes of feeling underemployed were mainly lack of intellectual challenge and doing tasks requiring little skill.

5.8 Pay levels

Finally, in this chapter on jobs, we present data on pay levels. Arguably, one measure of successful progress in the labour market can be salary attained. There are little data on graduate salaries other than those on starting salary paid to new graduates (*eg* AGR, Sussex CDU own survey, CSU).

In the survey, the vast majority (97 per cent) of graduates when asked about their current job (or recent most significant one) were paid a salary. Although unpaid work is increasingly being taken by some graduates as a 'foot in the door' or a way to gain work experience, it still accounts for a small minority, and not usually taken by graduates 18 months or more into their careers. The survey confirms this.

The average (median) salary over the three years, was £12,000 to £14,000. One in three was earning less than £12,000, but a quarter were earning more than £16,000 (Table 5.9). These salaries compare with an average starting salary for UK graduates in 1995 of just over £14,000 (see CSU, August 1995; AGR January 1996).

Table 5.9: Salary of graduates, by year (per cent)

	1993	1992	1991	All
Under £8,000	13	17	7	11
£8-10,000	13	9	7	9
£10-12,000	17	18	14	16
£12-14,000	27	20	22	23
£14-16,000	14	17	17	16
£16-20,000	11	16	22	18
Over £20,000	6	3	10	7
N	*205*	*167*	*393*	*765*
Mid-point of median range	12,229	12,108	13,939	

Source: IES/CDU Survey

Age or length of time since graduation are likely to be factors influencing salary levels, so it was to be expected that the graduates from 1991 would be earning more, as they had been in the labour market longer. This is confirmed in the survey findings, especially at the extremes: considerably fewer of the 1991 cohort were at the bottom end and considerably more at the top end of the salary ranges. Table 5.9 also shows that the 1992 graduates had made less progress than might have been expected: they had the lowest median salary, and only three per cent were earning over £20,000 compared to six per cent of 1993 and ten per cent of 1991 graduates. This could be interpreted as further evidence of labour market disadvantage continuing beyond initial experiences, which has been highlighted earlier for the 1992 cohort (see Chapters 3 and 4).

Comparing average current salaries of graduates in the survey with initial salaries, also shows that progress has been less for the 1992 cohort, as Table 5.10 shows. The 1991 graduates salaries grew by 27 per cent over three years compared to 15 per cent growth for 1992 graduates over two years.

Male graduates in the survey were likely to be earning higher salaries than females. Overall, 33 per cent of men were earning in excess of £16,000 compared with 19 per cent of women, by the end of 1994. Male 1993 graduates were earning an average of £12,761, eight per cent more than the female average of £11,797; and male 1991 graduates were earning £14,477, seven per cent more than £13,502 being earned by female graduates on average. These findings are consistent with other graduate follow-up studies which have shown salaries of male graduates to be higher (*eg* Brennan and McGeavor, 199; Clarke, Rees and Meadows, 1988).

Previous research has also found that subject was an important factor in graduate earnings. This also was confirmed in this survey. Average earnings for graduates in mathematical science, engineering/technology and social science were higher than for others. 1993 graduates from mathematical sciences were the top earners averaging £14,085, followed by engineering/technology at £12,750 and social science at £12,613. The lowest average for 1993 graduates was humanities at £9,705. 1991 graduates in mathematical sciences were also top earners, at £15,787. The corresponding figure for engineering technology was £15,750 and social science £13,583. By this stage, 1991 graduates from

Table 5.10 Average current and initial salaries, by year

	Current (December 94)	Initial (in December of graduate year)
1991	£13,939	£11,000
1992	£12,108	£10,500
1993	£12,229	£11,000

Source: IES/CDU Survey

physical sciences were doing rather better than social scientists. This subject differential partly explains the gender differences as mathematical sciences, physical sciences and engineering/ technology are both subjects where women are poorly represented.

Degree class had an effect (also consistent with previous research findings): both 1991 and 1993 graduates who had gained better classes of degrees were earning higher salaries. For 1992 however, the picture was different with the highest salaries being earned by those with lower second degrees.

Top earning jobs included:

- financial or office managers
- software engineers
- design and development engineers
- computer programmers and analysts
- teaching professionals (other than school teachers)
- journalists and writers.

However, while some graduates in these jobs were earning in excess of £20,000, they were representative usually of only about 15 to 20 per cent of graduates in these occupations.

Graduates in the financial sector tended to be earning most: 44 per cent earned over £16,000. Lowest salaries were recorded by graduates in distribution/hotel/catering (14 per cent over £16,000) and 'other services' (15 per cent).

5.9 Summary

This chapter has presented detailed job information. It has shown the variety of jobs taken up by graduates. Most of those in work were in full-time jobs, but a significant minority were in jobs with fixed term contracts, of varying lengths. Self-employment was still relatively rare.

By occupation level, almost four out of five were in managerial, professional or associate professions/technical jobs and the single most popular occupation was teaching (13 per cent). There was a visible broadening in the range of jobs reported over the cohort years.

Seventy per cent of the employed graduates were working in the services sector, mainly one in three in public services and one in five in financial services. A small proportion, six per cent, were employed by voluntary/community organisations. Small firms were well represented in the survey, with over two-fifths of the graduates working in companies with fewer than 200 employees, and 15 per cent in very small firms (fewer than 20 employees).

The main work location was the South of England, with two out of three graduates in jobs located there. One in five graduates overall were working in the Sussex counties, but this rose to one in four of the 1993 cohort. A small proportion, 13 per cent, were working abroad, half of them in other EU countries.

A third of the graduates' jobs had been newly created positions, often because of company expansion or restructuring. Almost half of these new jobs were in small firms (under 200 employees).

While four out of five graduates were in jobs which were broadly of 'graduate level', only half said a degree was a formal requirement and even less, 43 per cent, thought their work required graduate level ability. One in ten graduates knew that their job had been filled previously by a non-graduate. The proportion of graduates in what they themselves perceived as a graduate level job declined over the cohort years, from 84 per cent for 1991 to 73 per cent for 1993 graduates.

Further evidence of the extent of underemployment came from their own assessment of their jobs. Over half thought that they were underemployed, and 24 per cent thought they were very underemployed. Levels of perceived underemployment increased over the cohort years. It was highest for those in clerical and secretarial occupations and lowest in professional occupations, though in the latter it was still a comparatively high 44 per cent. The main reasons given were lack of challenge/routine job, not using skills to the full, feeling they had more to offer/wanted more involvement and doing tasks requiring little skills. Those in professional jobs were more likely to feel underemployed because they had more to offer or were not using skills to the full than because they were in unchallenging, routine jobs which required little skill. The latter correlated closely with those graduates in the lower skill level occupations.

Finally, on pay, there was a wide range of salaries given. The average was in the range £12,000 to £14,000, and a quarter were earning over £16,000. Progress on pay had been modest over time. Differences were found by gender and subject, in line with national trends. The highest earners, in all three years, were from the mathematical sciences.

6. Influences, Difficulties and Satisfaction

This penultimate chapter on the survey discusses some of the more qualitative aspects of jobs and work. This includes the factors of influence in getting their current job, difficulties experienced and satisfaction with their job outcomes. It also discusses the extent to which their job expectations have been met. The statistical findings are supplemented by illustrations of a number of individual career experiences to date, drawn from the questionnaires.

The discussion in this chapter develops some of the themes highlighted in previous chapters relating to the relevance of degree studies and the diversity of career paths that graduates experience.

6.1 Factors of influence

From a set of five factors which may have been influential in getting their current job, the graduates were asked to assess how important they were to them. The factors given were those which appear commonly in job specifications or which candidates are asked to write about when completing applications. The overall findings are shown in Table 6.1.

The most important factor, in terms of the numbers of students giving it, was 'a degree'. Over three quarters of all respondents felt this was of some importance and half felt it was very important. This is in line with the findings in the previous chapter which showed that a degree was a formal requirement

Table 6.1: Factors of importance in getting a job

	% who identified each factor as important	% who identified each factor as very important
A degree	80	52
A degree in specific subject	58	32
Work experience – before/at university	56	25
Work experience – since university	64	39
Student activities	27	6

Source: IES/CDU Survey

Table 6.2: Importance of 'any degree' and specific subject of degree, by subject of study

	Any degree		Specific degree	
	a) important	b) very important	a) important	b) very important
Engineering/ technology	89	66	86	64
Mathematical sciences	88	59	78	46
Biological sciences	82	58	67	38
Physical sciences	78	54	65	40
Social sciences	78	52	49	25
Humanities	79	43	41	23
Languages	77	42	44	15

Source: IES/CDU Survey

for almost half of the sample and that it was necessary or helpful for three-quarters (see section 5.7).

BSc graduates, especially those with engineering and technology first degrees were likely to put more emphasis than BA graduates on having a degree (Table 6.2). It was also given more often by 1991 than later graduates as an important factor. This is probably because they have been longer in the labour market, and less likely to be in their first job, but also because 1993 graduates were less likely to be in what they perceived to be 'graduate level employment' (see section 5.7).

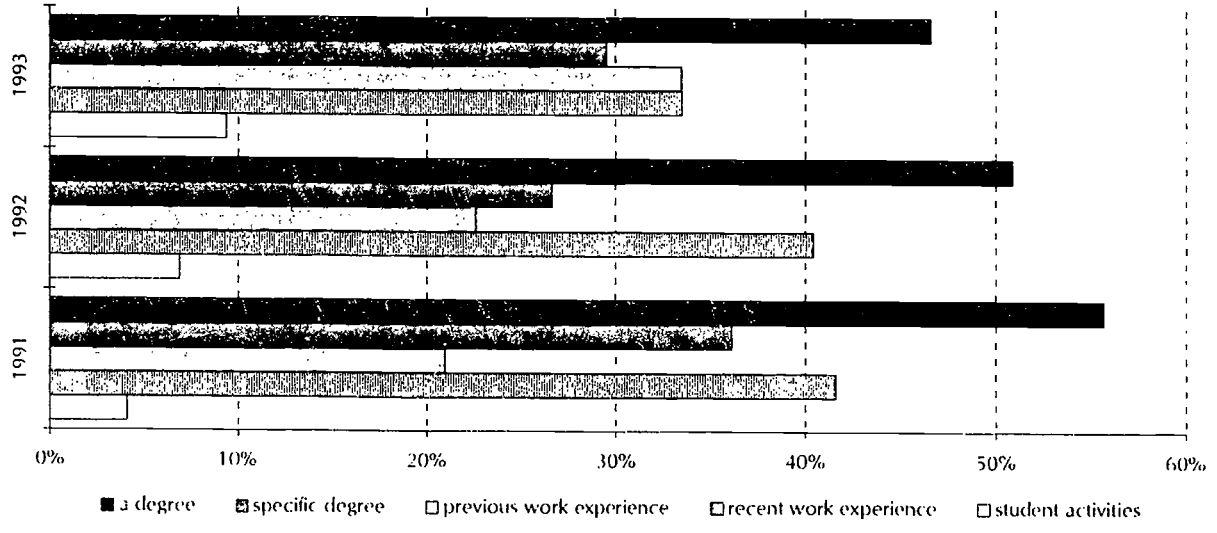
Having 'a degree in a specific subject' was considered less important overall than having 'a degree', though over half considered it an important factor and one in three considered it to be very important in getting their current job. BSc graduates put more emphasis on this factor too, particularly engineering/ technology graduates.

'Work experience before/at university' appeared to be slightly less important than 'work experience after university', but both were mentioned by a significant minority as being very important in getting their present job (see Table 6.1). Work experience before/during university was slightly more important to BA graduates, especially humanities and languages graduates, than BScs.

The 1993 graduates were more likely than either 1991 or 1992 graduates to consider that their work experience at/before university was a very important factor, while conversely post-university work experience was more significant for the 1991 and 1992 graduates (see Figure 6.1).

Student activities came out as the least important factor, with only 27 per cent giving it any importance at all. Its very low position relative to the other factors is somewhat surprising given the emphasis that graduate recruiters appear to put on it in application forms. It is worth noting, however, that for

Figure 6.1: Factors of influence in getting a job, by cohort year (percentage indicating each as very important)



Source: IES/CDU Survey

around half of the graduates this was not their first job since graduation and so their university experience may not seem as relevant as experience subsequently.

Analysing these data by the kinds of jobs they were in, not surprisingly shows that having a degree was much more important for those in graduate level occupations than others: 94 per cent in 'graduate level employment' compared to 16 per cent in 'non-graduate level employment' gave it some importance as a factor (*nb:* this is the definition of graduate level employment used in Chapter 5 and developed from the graduates' description of their job, see section 5.7). As Table 6.3 shows, those in non-graduate level employment were more likely to consider work experience (at, before or after university) as the main influencing factors in getting their current job.

Graduates currently in jobs in different sectors were influenced by different factors, but this tended to be associated with the

Table 6.3: Importance of factors in getting a job, by type of employment

		In 'graduate' level job	Not in 'graduate' level job
Any degree:	% fairly important	63	1
	% very important	31	15
Specific subject degree:	% very important	39	1
	% fairly important	30	1
Previous work experience (before graduation):	% very important	23	30
	% fairly important	32	30
Previous work experience (since graduation):	% very important	41	35
	% fairly important	24	26

Source: IES/CDU Survey

sectoral distribution of jobs at different levels. So, for example, the sector with the lowest proportion of graduates giving 'a degree' or 'having a specific degree' as an important factor of influence was 'distribution, hotels and catering' where more of the non-graduate jobs were located (see section 5.7). There was little difference between sectors in the importance given by graduates to 'having work experience at or before university'.

6.2 Other factors

A variety of other factors was given by respondents, in addition to the ones listed on the questionnaire, including:

- postgraduate or professional qualifications (given by 19 per cent of those listing additional reasons)
- personal characteristics/personal background (19 per cent)
- relevant work experience (14 per cent)
- contacts — networking, knowing and meeting the right people (13 per cent)
- transferable skills, *eg* teamworking, communication (13 per cent)
- worked for organisation before (11 per cent)
- specialist skills (not related to degree) (ten per cent).

Others such as hobbies, having a good degree, coming from Sussex University, appearance, references, mobility, and so on were also given but each by less than ten per cent.

'Postgraduate or professional qualifications' was given less often by the more recent graduates. While 23 per cent of 1991 graduates gave this as an important factor, it dropped to 13 per cent of 1993 graduates. This is likely to be due to the smaller proportion in 1993 who had gained these qualifications by the time of the survey. 1993 graduates were more likely to give 'worked for organisation before' and 'job-getting skills and tools' than earlier graduates. Women were twice as likely as men to give 'postgraduate or professional qualifications' (24 per cent compared with 13 per cent) as another factor of importance in getting their current job. They were also more likely to give 'personality, *etc.*'. BA graduates were slightly more likely than BSc graduates to emphasise factors such as personality and knowing the right people. 'Relevant work experience' and 'having professional/postgraduate qualifications' was given more often by those in graduate level jobs, while those in non-graduate level jobs were more likely to rate 'knowing the right people' and 'worked for organisation before' as important job-getting factors.

Table 6.4: Why take this kind of work?

	% identifying each reason* as important	% ranking it as most important reason
Suited my skills and interests	77	36
One of few options available	44	16
Attracted by good prospects, *etc.*	42	11
Followed on from degree subject	36	8
Arose from previous experience	35	10
Suggested by family/friends	9	1

** per cent who identified it as in top three in terms of importance*

Source: IES/CDU Survey

6.3 Why take the job?

Graduates were asked what prompted them to take this kind of work. Several reasons were given and they were asked to select the three most important ones and rank them in order of importance. Six of the reasons given were selected more often than the others in their choice of three, as shown in Table 6.4, but one, 'it suited my skills and interest' clearly came out on top. It was chosen among the three most important reasons by over three-quarters of them and ranked the single most important one by 36 per cent. None of the others was selected in the top three by more than 44 per cent or ranked as the single most important reason by more than over 16 per cent.

There were slight differences in the responses from different graduate groups, the main variation being by subject of degree. Although graduates from all subjects ranked the reason 'it suited my skills and interest' as of most importance, other reasons were given more prominence in some subjects. For example, the engineering/technology graduates and the mathematical science graduates were more likely than the other graduates to choose 'attracted by prospects' as the most important reason (over 26 and 21 per cent respectively of the former did so compared with 11 per cent for the sample as a whole). Physical scientists were more likely to choose 'one of few options available' (24 per cent gave it as most important reason, compared with 16 per cent for whole sample).

6.4 Selection and assessment

The most common selection experience was to have only an interview. Almost 60 per cent had one interview only and 35 per cent had more than one interview. Other selection methods were experienced by comparatively small numbers (none by more than 20 per cent). Aptitude tests, medical examinations and group discussions were experienced by 13 to 17 per cent, and under ten per cent experienced personality questionnaires,

presentations, assessment centres or other exercises. The majority (58 per cent) had only one type of assessment, the most common being an interview only. A further 23 per cent had experienced two assessment methods, the most common pairs being an interview plus a medical, an interview plus a group discussion, and more than one interview plus a medical. Nine per cent had experienced more than three different forms of assessment.

There was little change over the cohort years in the experiences of different selection methods. There was a slight rise from 1991 to 1993 in the proportions undergoing tests and assessment centres and medicals. This reflects an increasing use generally of these methods in the labour market.

As might be expected, those in managerial and administrative jobs were more likely to have been selected by more than one interview and by aptitude test/personality questionnaire, while nearly all of those in secretarial/clerical work experienced only one interview. Medicals were more likely to be given to those taking up professional jobs. Interestingly, those in sales jobs were more likely than those in professional jobs to have more than one interview, an aptitude test, personality questionnaire and an assessment centre.

6.5 Expectations versus experience

Once in the job how did the graduates feel? Did this job live up to their expectations? And how satisfied were they with their job outcomes? Expectations of graduates were investigated using a set of job characteristics developed from previous IES and other research on graduates. The graduates were asked to consider the expectations they had for their current job when they started it, against each job characteristic and to rate them high, medium, low or not applicable. They were then asked to consider the actual levels experienced.

Overall, graduates had relatively high expectations of being busy with a volume of work to do, getting feedback on their own performance, having a variety of work and to be given career opportunities and training (see Table 6.5). By comparison, expectations about use of skills or degree subject, autonomy and responsibility and supervision of others were comparatively low.

1993 graduates had lower expectations on average than those from earlier years on job aspects such as variety of work, level of responsibility and opportunities to supervise others, but slightly higher on getting feedback and use of their degree subject knowledge and skills. To some extent these kind of differences, relating to responsibility levels of job and use of degree, would be expected as the 1993 graduates were more likely to be in their first job and are closer to the point of exit from university.

Table 6.5: Expectations of their job (per cent)

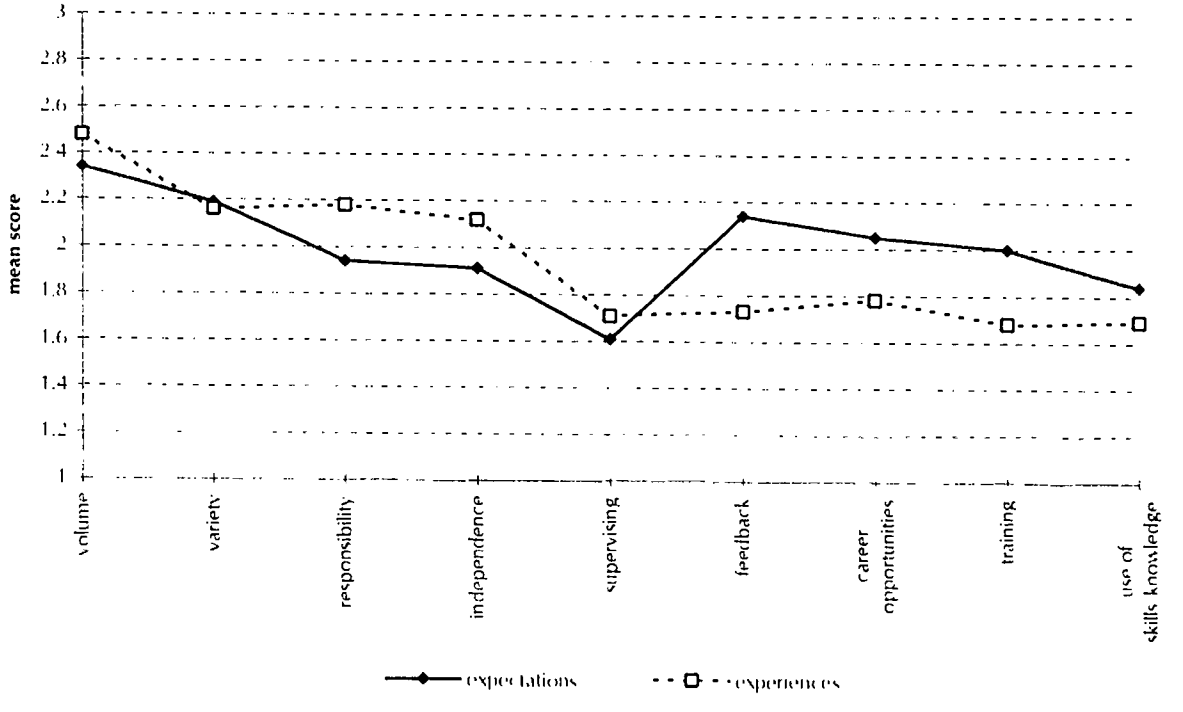
	Low	Medium	High
Volume of work	5	56	39
Variety of tasks	15	51	34
Level of responsibility	28	50	22
Autonomy/independence	28	53	19
Supervision of others	56	27	17
Performance feedback	16	55	29
Career opportunities	23	49	28
Volume/level of work	26	48	26
Use of skills/subject	40	36	24

Source: IES/CDU Survey

Various research studies have shown that graduates' experience at work do not live up to their expectations (Arnold, McKenzie and Davey, 1992). Typically, graduates experience more autonomy and less skill use than they had expected. Also, they tend to be disappointed with future career opportunities, with their employers and training opportunities, and perceived relevance of training is worse than expected.

Analysis of the Sussex University graduates' data show some similarities to these findings but also some differences. Overall, the majority of experiences were broadly in line with expectations, which suggests that graduates in this survey were

Figure 6.2 Expectations versus experiences in work (total sample)



Source: IES/CDU Survey

more realistic than in earlier research studies. Expectations were higher than experienced in three areas in particular: career opportunities, getting performance feedback, and training (see Figure 6.2). On the other hand, experience exceeded expectations in two areas in particular: level of responsibility, and autonomy/ independence. Expectations more or less matched experience in their use of skills and degree subject knowledge, variety and volume of work, and supervision of others.

Separate analysis for each cohort year showed there to be very little difference. The only change related to career opportunities where by 1993 expectations and experiences had moved closer in line. Women and men had broadly similar patterns. Perhaps not surprisingly, graduates who felt underemployed in their jobs (see Chapter 5) were more likely to have mismatches between expectations and experiences, especially in relation to career opportunities, getting feedback, and variety in their work (Figure 6.3).

6.6 Satisfaction

The graduates were also asked to assess their satisfaction with their current job in terms of the same job aspects. Overall, only one in four graduates' responses showed dissatisfaction, indicating that on the whole the graduates were happy with their job outcomes as measured in this way.

Aspects which graduates generally expressed satisfaction with were:

- autonomy, variety of work, level of responsibility, volume of work, and supervision of others.

These are all aspects where levels of expectation were lower or about the same as had been experienced in their job (see above).

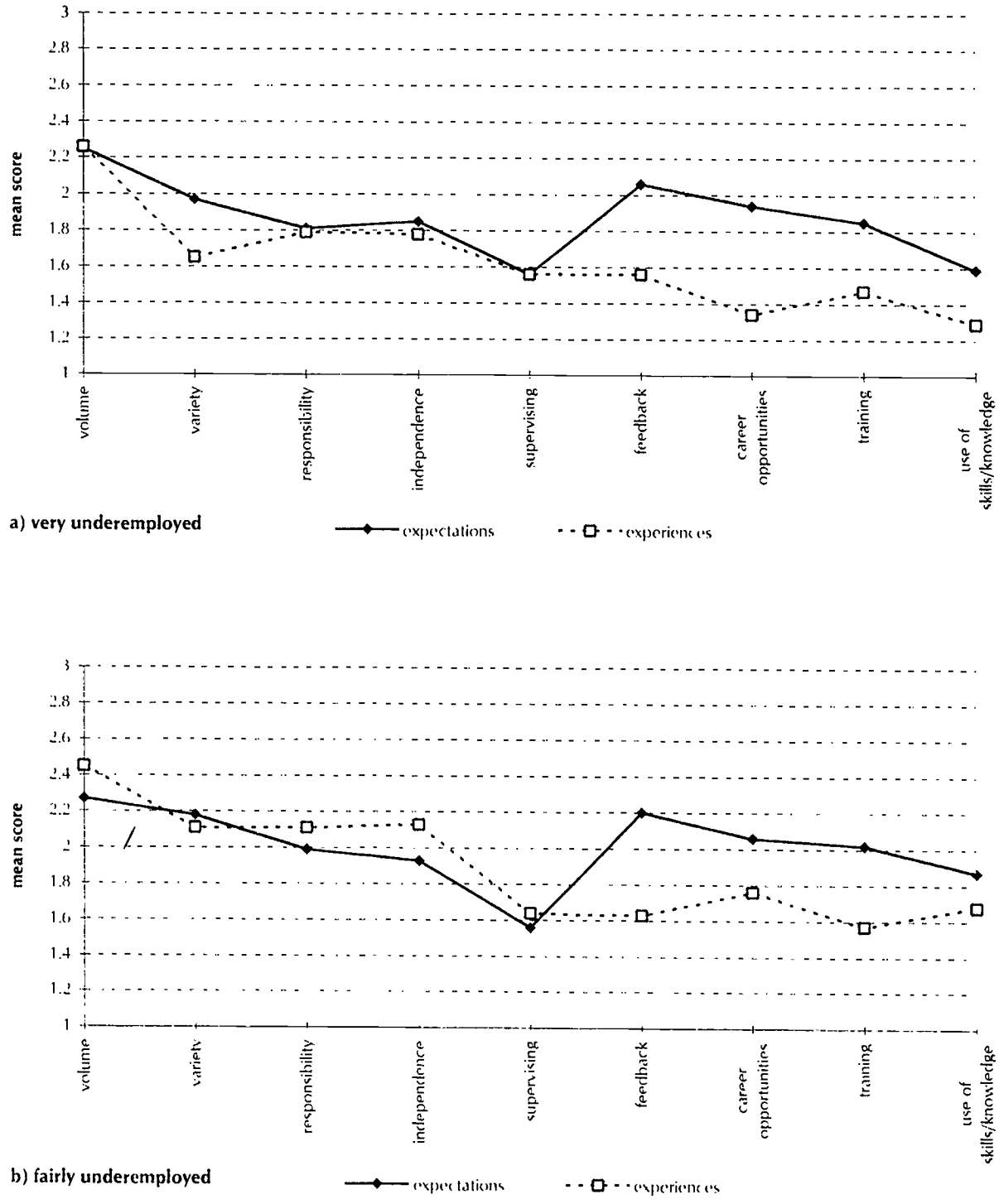
By contrast, aspects which graduates generally expressed dissatisfaction included:

- career opportunities, training, getting feedback, and use of skills and degree subject knowledge

and these are areas where expectations were higher than experienced. 'Getting feedback' was highlighted as an area of particular dissatisfaction by one in three graduates, and slightly more, 37 per cent, were dissatisfied with career opportunities (Figure 6.4).

Graduates from the 1992 cohort appeared, overall, to be more dissatisfied on average with their job outcomes than the graduates from the other cohort years. They had higher percentages expressing dissatisfaction with each of the job aspects than those from the other years. This is further evidence

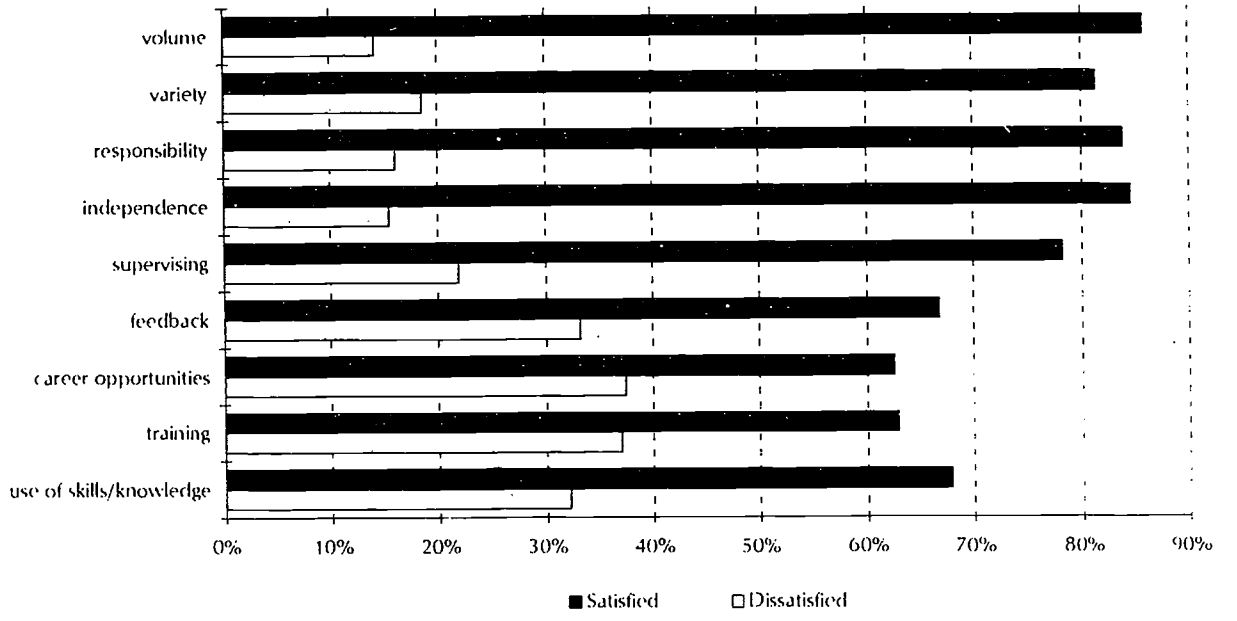
Figure 6.3: Expectations versus experiences in work of those feeling a) very underemployed and b) fairly underemployed



Source: IES/CDU Survey

to indicate that 1992 graduates had a less satisfactory experience in the labour market. Not only did they experience initially more difficulty in finding employment (see Chapter 3), but their outcomes seem to have been less satisfactory than for those from the other two years.

Figure 6.4: Job satisfaction: percentage saying they were satisfied and dissatisfied with different aspects of their jobs



Source: IES/CDU Survey

Overall, there was more contentment about jobs among graduates in professional occupations than others. There was a strong link between level of job and overall satisfaction, with most of the dissatisfaction coming from graduates in lower level jobs, in particular clerical and secretarial and the sales occupational groups. Those who perceived themselves to be very underemployed were particularly dissatisfied with the use they were making of their degree skills and subject knowledge (70 per cent commented in this way). Career opportunities were also given as an aspect with a high level of dissatisfaction for this group. Generally, graduates who felt underemployed were four times as likely to express dissatisfaction with any of the job aspects than those who did not feel underemployed.

6.7 Job difficulties

Turning to specific job difficulties experienced, we again find career opportunities and dissatisfaction with training featuring strongly:

- Lack of career opportunities was the main difficulty highlighted, identified by 73 per cent, including 16 per cent who had encountered it a great deal.
- Next came lack of challenging work, identified by 64 per cent as a difficulty, including 15 per cent who had encountered it a great deal.
- Also important was lack of proper (or unsatisfactory) training — identified by 73 per cent as a difficulty, including 11 per cent who had encountered it a great deal.

Table 6.6: Extent of difficulty encountered in job (mean scores)

	1993	1992	1991
Lack of career opportunity	2.65	2.83	2.74
Lack of training	2.54	2.78	2.62
Lack of challenging work	2.61	2.64	2.51
Lack of supervision/direction	2.34	2.41	2.43
Tight control	2.30	2.56	2.35
Lack of necessary skills	2.00	2.12	1.98
Age discrimination	1.52	1.56	1.46
Sex discrimination	1.37	1.41	1.45
Racial discrimination	1.15	1.13	1.14

Source: IES/CDU Survey

The three difficulties experienced the least were:

- racial discrimination — identified by eight per cent
- sexual or age discrimination — identified by 23 and 26 per cent
- poor relations with other employees — identified by 39 per cent.

Table 6.6 shows the mean scores in terms of extent of difficulty encountered for each year (*nb:* this is the average of scores one to five where a great deal of difficulty scored five and no difficulty scored one, therefore the higher the mean score the greater the extent of difficulty). Overall, more difficulties were encountered relating to lack of career opportunities, showing that it is not just an initial concern for graduates. Lack of training and lack of challenging work also were areas where a more than average amount of difficulty was encountered. In the majority of areas, the 1992 cohort encountered more difficulty, especially relating to lack of career opportunity, lack of training, tight control and lack of necessary skills.

In a similar way, Table 6.7 shows the extent of difficulty encountered for young and mature graduates by calculating mean scores for each aspect. Mature graduates generally experienced more difficulties related to lack of career opportunities, and younger graduates more difficulties due to age discrimination. The latter is somewhat surprising as the expectation is normally thought to be the reverse. Graduates in 'non-graduate level' work encountered more difficulties with career opportunities and the challenging nature of their work. This was especially so for those on clerical and secretarial work, but less so in sales jobs.

It may be that graduates experience problems in their early careers because mostly they had 'non-vocational' degrees, and were not sufficiently prepared for the realities of a very

Table 6.7: Extent of job difficulties (mean scores), by age

	Mature	Young
Lack of career opportunities	3.04	2.69
Lack of training	2.51	2.64
Lack of challenging work	2.58	2.56
Lack of necessary skills	1.82	2.05
Age discrimination	1.37	1.52
Sex discrimination	1.40	1.42

*Mature graduates were aged 21 or over at entry to degree course

Source: IES/CDU Survey

competitive labour market and the flatter career structures that now exist in many organisations.

6.8 Career development

Finally, we turn to graduates' views on their careers to date. Career planning was first engaged in at different stages. Only one in three graduates had started thinking about their career before coming to university. Slightly more (41 per cent) started to think about it while at university but the remainder (25 per cent) did not do so until after graduating. The latter included a small minority, eight per cent, who some six months after graduating, had still not thought about careers. They were mostly young men, from a variety of subject backgrounds.

Analysis by cohort shows a slightly increasing trend to start thinking about careers during, rather than after, university (the 'during' figure was up from 39 per cent in 1991 to 43 per cent of 1993 graduates). Women were slightly more prepared career-wise than men by the time of graduation (77 per cent of women compared to 70 per cent for men), as were mature graduates. Those taking vocational subjects, such as the engineers, also tended to think about careers earlier.

There is some evidence from the survey that those graduates who have thought about careers at an earlier stage fare better in the labour market. They were more likely to have a permanent job, be in graduate level employment, and less likely to have experienced any unemployment (Table 6.8).

Table 6.8: When graduates first thought about careers (per cent)

	Before university	During university	After university
Currently in a job	84	82	80
In a high level occupation	83	80	70
Experienced unemployment	46	53	69

Source: IES/CDU Survey

Table 6.9: Use of CDU by cohort year (per cent)

	1991	1992	1993
Only before graduating	51	54	47
Before and after	25	29	36
Only after graduating	10	6	8
Used CDU (at some time)	86	88	91

Source: IES/CDU Survey

A very high proportion of graduates in the survey (80 per cent) said they had used the services of the university's CDU before graduation, and 40 per cent did so after graduation (some did both). Half the sample had *only* used the CDU before graduation and nine per cent had *only* used it after graduation. Overall, a total of 88 per cent had used the CDU at some time in the past. More of the 1993 than the 1991 graduates had made use of the CDU (Table 6.9).

Almost all of the sample of graduates (89 per cent) had experienced some kind of difficulty with their career development since graduation. Half had experienced one or two of the difficulties listed in the questionnaire, and a quarter had experienced four or more. The most commonly experienced difficulty was a lack of job opportunities, cited by two out of three graduates who had experienced any difficulty (Table 6.10). This clearly reflects the difficult job market which they faced in the early 1990s when demand for graduates was depressed. Over 40 per cent felt they had suffered from a lack of career direction and almost one-third complained about a lack of career guidance since graduation. These graduates appear to require more than was on offer to them by the university or elsewhere after graduation. Interestingly, most (91 per cent) of those claiming they suffered from a lack of careers guidance after graduation had used the CDU services at some time.

A minority, two-fifths, encountered difficulties in their career development since graduation which related to a lack of training and skills. Some of this may be due to a lack of preparation in their course of study for employment and the labour market. A lack of career progression was frustrating another third of the

Table 6.10: Difficulties encountered in careers

	%
Lack of job opportunities	67
Lack of direction	43
Lack of training and skills	40
Lack of career progression	32
Lack of career guidance	31

Source: IES/CDU Survey

graduates, and a smaller proportion were restricted by their commitments and responsibilities or by health problems. Other difficulties, cited by relatively small numbers included: lack of places on courses, lack of confidence, low salaries, competitiveness of chosen career, lack of business skills, pigeon-holed, and so on.

The most commonly cited career difficulties were mentioned by all cohort years, but slightly more of the 1992 cohort experienced problems than those in other years. This fits with earlier assertions that the 1992 cohort had a more difficult time in the labour market initially, and that these difficulties tended to persist for some time. In general, the graduates from the later cohorts were experiencing a higher level of difficulty in their career development (*ie* deciding on and following a career path) even although they had less time in the labour market.

Graduates were asked to rate their satisfaction with their career development since graduating. Three out of four were generally satisfied with it: a quarter of the graduates were satisfied to a considerable extent with their overall carer development, and a further 51 per cent were satisfied to some extent. Looking at different aspects of career development, graduates were more satisfied with the use of skills and experience than the opportunities available to them and the support and advice given to them. Most dissatisfaction lay with the opportunities available to them (40 per cent were dissatisfied with this to some extent).

Looking at each of the cohorts, the overall level of satisfaction is decreasing, and particularly in relation to opportunities available and use of skills and experience (Table 6.11). This undoubtedly relates to individual experiences, especially the greater difficulties encountered for the more recent graduates in finding suitable employment. In the survey, graduates who have had some experience of unemployment since graduation were twice as likely to feel dissatisfied with their overall career development than those with no experience of unemployment (31 per cent compared to 16 per cent). Mature graduates were also likely to feel less satisfied with career development to date than younger ones. Further study seemed to have an improving effect on career satisfaction.

Table 6.11: Satisfaction with career development

Percentage not at all satisfied with:	1991	1992	1993
Overall career development	20	26	29
Use of skills and experience	18	22	32
Opportunities available	38	40	43
Pace of career progress	26	33	31
Support and advice	36	30	32

Source: IES/CDU Survey

6.9 Career profiles

The following examples of experiences of individuals taken from the survey respondents, illustrate various career experiences.

Mike

Mike graduated in 1991 with a 2:2 in biology.

After taking a masters course in biotechnology at the University of Central Lancashire, he spent a few months looking for a job. By December 1994 he was in his second permanent job as a senior monitoring technician with a local authority waste management organisation, earning between £16,000 and £20,000.

Mike felt that the important factors of influence in obtaining his current job were: his first degree, his masters qualification and his work experience in the Civil Service (his first job).

He feels slightly underemployed at present because *'a certain amount of time is spent in administrative and non-technical tasks'* and *'very little of my science education is used'*. The main difficulty he has encountered in his present job is the lack of career opportunities. But Mike's experiences in his job have mostly exceeded his expectations when he started it, and he is generally satisfied with his job.

He comments: *'my career has been successful, but not in the way I expected. I recognise that university life is not solely about getting a job but my course at Sussex did not address the needs of a potential employer at all. This was most effectively covered by an industrial placement on my masters courses.'*

Sheena

Sheena graduated in 1991 with a 2:1 in geography.

After taking a year out to travel, she took a masters course at London University in landscape ecology design and management. By December 1994 she was in her third permanent job as a project manager on community forest project for a London borough, earning between £14,000 and £16,000 (fixed term contract).

Sheena felt that several factors had been of importance in getting her present job: the specific subject of her degree, her farming background, her masters course, her previous work experience, her local knowledge and *'I was working for the organisation on a casual basis already.'*

Overall, Sheena is considerably satisfied with her present job, but she has some dissatisfaction with the level of training provided. Most of her expectations when starting the work have been in line with experiences.

'I was offered a short term contract which was altered to a full-time project manager three weeks later when the existing manager was headhunted. I was in the right place at the right time.'

Ann

Ann graduated in 1991 with a 2:1 in English.

She went straight into a job in the Civil Service as a Higher Executive Officer in London. Three years later she is still in this job, earning an annual salary in the £16,000 to £20,000 band.

She entered this job as a graduate trainee, going through an extensive assessment process involving interviews, personality questionnaire, group discussions and exercises. Ann felt that her degree and *'satisfactorily completing the numerous stages of the entry process'* were the main factors of importance in getting the job.

She does not feel underemployed, but she has encountered some difficulties relating to training, a lack of career opportunities, job security and an expectation by her employer that she will do a considerable amount of unpaid overtime. Generally, her experiences in the job have exceeded her expectations.

'Overall, I am satisfied with my job content and responsibility which is varied and challenging, but I am disappointed by my opportunities for career progression which are not as good as were suggested. I am concerned about the lack of job security and the increasing denigration of the Civil Service as a whole.'

Graham

Graham graduated in 1991 with a 2:1 in sociology.

He has spent much of the time since then unemployed. This he feels is due to his lack of relevant work experience and the great competition for jobs. While looking for permanent work, Graham has worked in a voluntary capacity and has taken a part-time postgraduate diploma in information management. After nearly three years he has secured his first permanent job as an assistant librarian for a charity, earning in the range £12,00 to £14,000.

'Though unemployed for almost three years I was active. I started voluntary work almost immediately and this tied in with my diploma course a year later. I was looking for a relevant paid job but the voluntary experience was personally rewarding and vital in eventually getting me this job.'

Graham feels slightly underemployed in his job as the work is fairly routine. He has encountered a lack of training and poor communication channels within the workplace. He is generally satisfied with his job, in particular with the fact that he is busy, has a variety of tasks to do, has independence, opportunities to supervise others and can use his degree and postgraduate diploma skills.

Janet

Janet graduated in 1991 with a 2:2 in history.

After a few months unemployed and one month temping for the family firm she got her first permanent job as a software support programmer for a local small firm. In December 1995 she was earning between £10,000 and £12,000.

Janet felt that having a degree was of importance in getting this job — *'the boss wanted a graduate, but subject was irrelevant. He may have employed a non-graduate'*. Her work experience before and after university was also a factor.

Janet feels slightly underemployed in her job. Her main difficulties are the lack of career progression and *'obvious pecking order'*. She has experienced a lack of training and a lack of supervision. Generally, though, she is satisfied with her job, in particular the opportunities it gives to supervise others.

Kevin

Kevin gained an upper second BEng in Electrical and Mechanical Engineering in 1991. After four months he gained a permanent position with an Electrical and Electronic Engineering company on a two year graduate training programme accredited to the Institute of Electrical Engineers. Three years later, Kevin is still with the company as a Senior Engineer designing electronic instrumentation. He is earning between £14,000 and £16,000 a year.

To get the job Kevin felt that having a degree was more important than the particular subject of his degree. He felt that his vacation work experiences were of no importance but that his involvement in student activities at university were fairly important.

His current position was newly created by the company to keep up with its *'need for new young engineers'*. Kevin feels that this job is a graduate level job and having a degree was a formal entry requirement, that the work requires graduate ability, and that entry to the position was via a graduate trainee programme.

Kevin was not entirely happy with the traineeship: *'At first I felt very underemployed in the graduate training scheme, often simply shadowing other employees'*. Kevin encountered difficulties in the form of a lack of career opportunities, a lack of challenging work and a lack of direction at that time.

Josh

Josh graduated in 1991 with a first class honours degree in Computer Science and shortly after graduating gained a full-time permanent job as a Software Engineer with a large Computer Manufacturer. Josh has been in this job for over three years and is now earning over £20,000.

The position of Software Engineer was an existing job and the previous holder had been a graduate. Josh felt that the job was a graduate level job and having a degree was helpful in getting the job, and that the work requires graduate level ability. Josh noted that having a degree in his specific subject was also very important.

Three years into his job, Josh encounters very few difficulties in his work. He is considerably satisfied with most aspects of his job, finding that the work provided better experiences than he had expected when starting.

6.10 Summary

This chapter has presented findings from the survey relating to the graduates' views about their job and career to date. The key points of note are:

- Four out of five graduates said that their degree was an important factor in getting their current job and over half identified this as being very important. One in three viewed the specific subject of their degree, and one in four their work experience before/during university, to be very important factors. Engineers and technology graduates gave more importance to their degree as a factor of influence than others.
- A variety of other factors of influence were viewed as being important, including postgraduate and professional qualifications, personal characteristics and personal skills, relevant work experience and contacts.
- Graduates were far more likely to have taken their current job because it suited their skills and experience than for any other reasons given. Some of the other reasons varied in importance across the sample but mainly by degree subject, with engineering/technology and mathematical sciences graduates more likely than others to have been attracted to the job by the good prospects, salary, *etc.*, and physical scientists more likely to have taken it because it was one of the few options available.
- The majority had obtained their job via an interview only. One in three had two interviews and a smaller number had experienced other selection methods (*eg* aptitude tests, group discussions).
- Graduates had relatively high expectations of certain characteristics of their job when they started it, particularly in relation to the volume of work, getting feedback, variety of work and career opportunities. For the majority of graduates their actual experiences were broadly in line with expectations. The main area of divergence was in getting feedback, career opportunities, and training provided, where there was a greater likelihood that expectations were not met. By contrast, experiences were higher than expectations on average for level of responsibility and autonomy/ independence. Greater mismatch between expectations and experiences was found among graduates who considered that they were underemployed in their job, especially in relation to career opportunities, getting feedback and training.
- Most graduates were satisfied with their current job when assessed against a number of job elements. The main areas of dissatisfaction were the same as those highlighted in the previous paragraph, namely career opportunities, getting feedback, and training. Using skills/subject knowledge gained at university was also highlighted as an area of

dissatisfaction. Overall, there was more job satisfaction expressed by those in professional jobs than others.

- Most graduates identified some job difficulties, the main ones being the lack of career opportunities, lack of challenging work, and lack of training. These featured strongly among responses from 1991 as well as later graduates, indicating that they are not just initial concerns of newly qualified graduates.
- Career planning had been undertaken at different stages. Although seventy per cent had first thought about careers while or before coming to university, only one in three had first thought about it before university. Those graduates who had undertaken career planning earlier generally fared better in the labour market.
- Most graduates had used the services of the university's Career Development Unit.
- Almost all graduates had experienced some kind of career difficulty since graduation, the most common being a perceived lack of career opportunities. However, the majority were generally satisfied with their career development to date.

7. Summary and Conclusions

In this final chapter we summarise the findings presented in the report and draw out some conclusions and implications for students, careers advisers and the university itself.

The report is based on a sample survey of 1,023 home first degree graduates from the University of Sussex in the years 1991 to 1993. This represents a significant number of graduates, about one in three of the total output in this three year period. The overall survey response rate was 56 per cent. It was higher for 1993 graduates, 62 per cent, where addresses were more up-to-date, and lower for 1991 graduates, at 52 per cent.

7.1 Survey sample

Almost half of the achieved sample (473) graduated in summer 1991, and the remainder in 1992 (231 graduates) and 1993 (319 graduates). The sample was designed so as to capture a significant number of graduates with several years experience in the labour market since completing their degrees, as well as fairly recent graduates.

The sample covered the full spectrum of students at Sussex University. It was not biased in any significant way due to variable response rates from different groups. The main difference between the sample and the population was that the sample was slightly over representative of women and of younger students compared with the population.

The main characteristics of the sample were as follows:

- There were slightly more female than male graduates (56 per cent of the sample were women).
- They were mostly young in age — only 16 per cent were aged 21 years or over at time of entry to degree studies. The proportion of mature graduates was higher in the 1993 sample in comparison to 1991, and in particular, the proportion of mature female graduates was higher for that year.
- Only nine per cent were from ethnic minorities.
- Fifty eight per cent had graduated with a BA and 42 per cent with a BSc.

- The largest single subject group was social sciences (30 per cent); other arts and languages accounted for 26 per cent; and 23 per cent had degrees in physical or biological sciences, 16 per cent in mathematical sciences and five per cent in engineering/technology.
- Three out of five gained a first or upper second class degree.
- Seventy per cent gave South of England as their home location prior to entry, but this included only 11 per cent from East or West Sussex. Almost half of the mature graduates, however, were drawn from the Sussex counties. Six per cent of graduates were from overseas.
- Most had entered with traditional types of qualifications — 87 per cent had 'A' levels, four per cent had vocational qualifications and nine per cent had other or no qualifications. The average 'A' level points score was high, at 21 points, and half of the 'A' level qualified students had 20 points or more.
- Almost all the graduates had had some work experience prior to their degree study, including half with experience of a full-time job. Not surprisingly, almost all mature graduates had full-time work experience prior to their degree studies, but 33 per cent of younger ones had too.

7.2 Reasons for choosing Sussex University

Four out of five graduates chose Sussex University because of its location. Almost as high a proportion chose it because it 'had the right subject'. Being a campus university was a less significant factor, and only one in four graduates chose it because of its reputation. There were slight variations in response by subject of degree and by gender, but more by age and home location. The older students, who were the ones living closest to the university, were more likely to choose location as a reason for coming. Those from outside the South of England were more likely to be attracted by the campus environment and because of subject preference. This feedback from graduates, showing the relative position of the various factors of influence in choice of university, should be of interest to the university in the development of its marketing. In particular, it will need to project an image to an increasingly diverse group of potential students and in an increasingly competitive environment.

Most graduates chose their actual course of study because of their interest in the subject, but one-third was influenced by the job opportunities it offered. The latter was mentioned more by applied scientists, particularly engineering/technology students.

7.3 Mobility

One in four of the survey respondents was living currently in the Sussex counties, a significantly higher proportion than had lived there prior to taking their degree. This confirms the views of careers staff that many Sussex University graduates remain living locally after graduation. It also demonstrates both the impact of the university in producing a net inflow of highly qualified people into the local economy, and the importance of the regional as well as the national graduate labour market.

Slightly fewer than one in ten was living abroad, including five per cent in other European countries. This is only slightly higher than the proportion living outside the UK prior to degree study indicating that the international graduate labour market is still relatively insignificant in comparison to the UK market.

7.4 Initial destination

Within six months of graduating, only two out of five of the graduates were in permanent jobs. A further 19 per cent were in short-term or temporary employment (lasting less than three months) and 24 per cent were taking further study. Thus, 82 per cent of the students were either in work or further study. The average initial unemployment rate over the three years was 15 per cent.

1992 graduates experienced a more difficult time initially than those from either of the other two years. 1992 graduates were more likely to be unemployed initially (18 per cent) and less likely to be in permanent employment (36 per cent). This reflects both the economic cycle — 1992 was the year graduate unemployment peaked nationally — and the extent to which new graduates (and final year undergraduates) are prepared for the sudden swings in the labour market. The 1992 graduates entered university in the late 1980s at a time of high demand for graduates, and then had to come to terms with a completely different situation three years later. While graduate demand was still depressed in 1993, the graduates of that year may have been more in tune with the new situation and broadened their job search activities. Evidence from other parts of the survey supports this: 1993 graduates were more likely to have started career planning earlier and taken jobs where a degree was not an entry requirement, than 1992 graduates.

At this six month stage, women were less likely to be unemployed than men. Subject differences were also evident: engineers fared better than other scientists, and considerably better than some arts graduates.

7.5 Subsequent progress

Labour market success improved for most graduates as time passed. One year on, the unemployment rate had decreased for all years, down to ten per cent overall. For 1992 graduates it had halved in size, to nine per cent. Almost half of the graduates (all years) were in permanent jobs, but this proportion for 1992 was still lower than other years, indicating that 1992 graduates were still suffering a comparative disadvantage, possibly due to their initial experiences.

Six montns later (*ie* 18 months after graduation) the situation had improved still further. The proportion in permanent jobs was now 56 per cent, a gain of 17 percentage points on the six month figure. The unemployment rate, however, remained at ten per cent overall. The pattern for each cohort was slightly different. A higher percentage of the 1993 cohort were in permanent employment at this stage, 61 per cent, compared with the 1991 and 1992 cohorts. This is likely to reflect the labour market improvements which have become more evident in the last few years and, perhaps more importantly, the greater propensity for more recent graduates to be less restrictive in their choice of jobs (see paragraph 7.8).

Many of the differences between different types of graduates in terms of initial labour market outcomes diminished over time. Thus, by the 18 month stage, the gap between men and women in their likelihood of being unemployed had narrowed, as had differences related to age.

Subject differences still persisted however, reflecting the different career paths followed by graduates from different first degree disciplines (see paragraph 7.6). Thus, for example, graduates in engineering/technology, who are more likely than graduates from other disciplines to enter permanent employment initially, were, at the 18 month stage, still more likely to be in permanent employment. By contrast, pure scientists, who were more likely than others to pursue postgraduate studies initially, were still more likely to be doing this at the 18 months stage. Unemployment rates, which had been fairly similar across the broad subject groups at the six month stage, were still similar.

Those with lower degree classes were doing considerably better at the 18 month than at the six month stage: the proportion of graduates with 2:2s, and especially 3rds, in permanent employment had increased dramatically, and the corresponding proportions in short-term work and unemployment had fallen. They were only slightly less likely to be unemployed, and equally likely to be in permanent jobs, than graduates with better classes of degree, 18 months after graduation. This contrasts with their initial destination pattern, where differences by class of degree were considerably more marked.

The 1991 cohort had been in the labour market for over three years and so focusing on this cohort can provide evidence of career progress over a longer time period. By this stage, 72 per cent were in permanent jobs, compared to 41 per cent initially, and unemployment had fallen from 13 to seven per cent. Furthermore, two out of three 1991 graduates who had been unemployed initially were now in permanent employment, but nine per cent were unemployed (again/still). However, only one in three had been in permanent jobs at both points in time, showing that being continuously employed is not generally the norm (further evidence of this is shown in the next section). Another interesting finding was that those who had initially entered permanent employment were more likely to be in this state three and a half years on (though not necessarily in the same job), than those who had any other initial destination. The analysis of the 1992 cohort, comparing their employment status currently (*ie* two and a half years on) and at six months, produced a similar pattern of results.

7.6 Career patterns

The analysis of movement between different labour market states over time produced a measure of career turbulence and a set of career path profiles. A great deal of diversity was seen in individual career paths that individuals follow but, on the whole, relatively little turbulence in terms of career-state changeability (*ie* between the three states of in work, training, or out of work).

Several hundred different permutations could be identified over the first three years or so (*eg* job-unemployed-job-further study, *etc.*, or unemployed-job-job-job, *etc.*) for the 1991 sample. A technique was used to simplify these patterns by producing condensed career state profiles. The most common career path for the 1991 graduates was to be continuously in permanent employment over the three and a half year period, but this was taken by only 30 per cent of the graduates. The next most common, taken by 11 per cent of the 1991 graduates, was a period of further study followed by permanent employment. There were many other condensed profiles or career paths identified in the analysis, but each was taken by only a few per cent of the sample. Male and female graduates tended to have different career profile patterns.

Degree subject was again identified as an important variable in the analysis. The most common career profile, continuous employment, was far more evident among applied science graduates (47 per cent followed this path). This compares with less than a third of pure science or social science graduates. It was noticeable also that applied science graduates tended to have less career-state changeability than social science graduates.

Taking temporary work as a route into permanent employment was featured in the career profiles of some graduates, in particular those with lower class degrees.

It is important that students and the people that advise them in career decisions are fully aware of the extent of this variety in early career paths. The survey has produced a wealth of illustrative material which can be used to help newly qualifying graduates obtain a better insight into the kinds of career paths they might expect to experience. These survey results also lay to rest the myth that a typical career path or paths for graduates exist. In the past, most graduates may have expected to follow a career made up of virtually continuous employment, but this is not the case today. They are likely to encounter much more movement between periods of employment, further study and unemployment than previous generations did, and more turbulence in the first few years. There are also significant differences between graduates from different subjects.

7.7 Labour market activities

The survey provided a considerable amount of information about different labour market activities or states. Each is summarised below:

Permanent jobs

Most graduates had held at least one job since leaving university, and 80 per cent had experienced at least one permanent job (by the end of 1994). This percentage ranged from 90 per cent of 1991 graduates, who had been out in the labour market for over three years, to 72 per cent of 1993 graduates with only just over one year's experience. One in three of those who had experienced any permanent employment had held two jobs and only a few (nine per cent) had held three.

Forty-three per cent of the total sample had gained their first permanent job within the first six months of completing their degree. The more recent graduates appeared to take longer to enter their first permanent job than those from earlier years.

Half of the 1991 graduates were still in their first permanent job some three and a half years later, an indication of fairly modest levels of mobility, probably caused by the lack of job opportunities due to lower turnover and business recession.

Short-term jobs

A short-term job was defined in the survey as a temporary one lasting less than three months. Just under one in five graduates in the survey went initially into short-term jobs. This percentage changed little over the 1991 to 1993 period.

Short-term work is much more likely to be a feature of the early part of graduates' careers. This finding was more evident for the more recent graduates. Three quarters of the graduates with experience of short-term employment had first taken it within the first six months.

It was generally relatively short in duration: 40 per cent who had been employed in this way had been so for less than three months in total duration, and 85 per cent for less than 12 months in total.

The type of short term jobs varied widely. One-third were in the clerical/secretarial occupational category and 14 per cent were in the professional category. Most were in the services sector.

Further study

The majority of graduates, 62 per cent, had taken further study at some time since completing their first degree, and half had first done so within the first six months. This ranged from the very vocational (*eg* teacher training, PGCE) to the more academic (*eg* PhDs). Most had experienced just one period of further study.

One in four of the 1991 cohort had studied for a masters qualification and one in five had embarked on a doctorate, by the end of 1994.

More of the 1992 graduates had undertaken further study at some time than graduates from either of the other two years. The higher incidence of further study for 1992 compared to 1991 graduates is likely to relate to the more difficult labour market the former experienced. 1993 graduates have been in the labour market for less time which may explain the lower incidence for them. However, the decreasing availability of funding for postgraduate study is also likely to be a factor.

Overall, the main reasons for taking further study were to enhance their career prospects (63 per cent did so) and for personal interest (55 per cent). Only for those taking PGCEs did the gaining of a formal entry requirement feature strongly among the motivations.

Graduates in the survey were clearly influenced in their choice of taking further study by a combination of factors, both positive (*eg* to improve employability) and negative (*eg* to avoid unemployment). This can be a complex area of decision making for individuals where good career guidance is essential and where further research would be beneficial.

More female than male graduates had taken further study. This is mainly explained by the higher ratios of women to men taking postgraduate teacher training.

The graduates travelled quite widely in the UK to do postgraduate qualifications, mostly to universities outside of the local area. Only one in four had remained in East or West Sussex to undertake further study.

Time out

Taking time out of the labour market, and therefore being available for employment, is a relatively uncommon state at any one point in time — only four per cent were in this position at the six month stage. It is, however, a fairly common experience for graduates, as the survey showed that one in three had taken time out at some time during their early career. It happened most commonly within the first few months of completing their degrees: one in three (of those who had taken time out) had taken time out immediately after graduation and 71 per cent within the first six months. The main reason for doing so was to travel or pursue leisure activities (63 per cent) or because they were awaiting the start of a new job (39 per cent). The former reason appeared less prevalent among 1993 graduates who were more likely than others to mention health reasons.

Unemployment

Lastly we come to unemployment, which had been experienced at some time by half of the sample. The total time spent unemployed ranged widely: for 34 per cent of the sample it amounted to less than six months in total, but 20 per cent had been unemployed for more than six months.

Three out of four of those who had been unemployed at some time experienced their first period of unemployment within the first six months of graduation, including one in four who had experienced this straight away, and a further one in three within the first month. The extent of initial unemployment shows the importance of making facilities relating to careers advice and information available to recent graduates as well as undergraduates, especially over the summer vacation.

Three out of five graduates who had experienced unemployment said that they would have worked in any job (that they were capable of doing). They showed less flexibility about location: less than half would have worked in any area of the country. The main factors that had hindered their search for a suitable job were lack of relevant experience and the economic recession, cited by 40 and 30 per cent respectively. On the face of it, the former seems somewhat surprising given the extent to which the graduates had some previous work experience (see paragraph 7.1) but does highlight the importance of getting *relevant* work experience to securing suitable employment on graduation. A relatively high proportion of the graduates had taken non-vocational degree courses, where there was little opportunity to

interact with employers via course project work or employer placements.

7.8 Current job

As mentioned above, most graduates had some experience of employment. For the majority it was quite limited, as only around half of the sample had held more than one permanent job. To gain further insight about employment experiences the graduates were asked for details about their present job. If not currently in employment, they were asked about their most recent significant job. The latter applied to 18 per cent of respondents to this set of questions.

Occupations

A wide variety of jobs was held currently by the graduates. A minority, two out of five, were in jobs which could be classified under the professional occupation category (of the SOC); a further 27 per cent were in associate professional and technical occupations, and 12 per cent were employed as managers and administrators. The remainder (22 per cent) were in a variety of lower skill level jobs, mainly clerical, sales and personal service occupations.

Most of the graduates held full-time jobs; part-time or variable hours working was comparatively rare (just seven per cent) but appeared to be slightly on the increase. A few (six per cent) were self-employed, and this too showed a slight upward trend.

The most significant occupation (numerically) was teaching, accounting for 13 per cent of the graduates. Next in order of numerical significance were: engineers/technologists, associate professional/technical jobs, business and finance professionals, literary, arts and sports professionals, and natural scientists. Other occupations each represented fewer than five per cent of the sample of graduates currently in jobs.

The survey provided evidence of a broadening over time in the range of jobs held by graduates. A number of jobs were reported by 1993 graduates which were not reported at all by the 1991 graduates, for example: finance manager, charity official, records clerk. Fewer 1993 graduates were in professional jobs than 1991 graduates (29 compared to 45 per cent), and more were in clerical and secretarial jobs (17 compared to eight per cent). This is likely to be caused by two factors: an increasing tendency for graduates to go into a wider range of jobs initially, as the scope of job opportunities for graduates widens; and the propensity for graduates to take short-term or temporary jobs initially and to take longer to enter their first 'real' job.

The wide range of occupational levels, in particular the relatively high proportion in non-professional or non-managerial occupations goes some way to explaining the relatively low salaries reported by some graduates (see end of this section).

As might be expected, male and female graduates exhibited different job profiles; fewer women were in the top three occupational categories (in terms of the broad skill level *ie* managerial, professional and associate professional/technical level occupations) and more women than men were in clerical/secretarial occupations. Engineering, technology and pure science graduates tended to have the narrowest range of jobs. More of the graduates from engineering and technology and from social sciences were in professional occupations than from other disciplines.

Some of the widening in the range of jobs was due to job creation: *ie* they were actually new jobs that the graduates were in. One in three of the graduates described their job as newly created. This indicates the importance of job creation in the graduate labour market and the need for careers advisers to keep continually up to date. Most of the job creation had come about as a result of company expansion or restructuring, and much of it was in small firms.

Companies

One in three graduates was employed in public services and a further one in five in financial services. The community or voluntary sector and the arts/media, both of which are considered as growth areas for graduates, accounted for six per cent and three per cent respectively. Industrial companies employed only 15 per cent, slightly lower than the national average for newly qualified graduates. Small firms were well represented: two out of five graduates were employed in firms with under 200 employees, including 15 per cent in very small firms (under 20 employees). Again, this is an indication of the breadth of the current graduate labour market which previously was considered to be dominated by large firms.

One in five graduates was working in firms in the local area (East or West Sussex) but this rose to one in four of the 1993 cohort, an indication possibly of the increasing employment opportunities locally or that more graduates tend to drift away after a few years (probably both).

Underemployment

There was evidence of some underemployment, that is the respondents were in jobs not requiring degree qualifications or were not being used to their full capacity (or both). This is not something that is easy to measure. While some evidence has

been produced in previous research studies to indicate its existence, the full extent of it, its pattern of distribution and trends are still not fully known.

The issue was explored in the survey in several ways and produced the following evidence of underemployment:

i. As noted above, a minority of the graduates were in professional level jobs according to the SOC, and 22 per cent were in jobs which are normally taken as being at below degree level. This is however, a rather crude measure of underemployment as it is based on a classification of occupations using job titles and educational qualifications.

ii. Half of the graduates were in jobs which had existed previously (*ie* they were not new jobs) and in 22 per cent of them it was known that the previous incumbent had not been a graduate. Thus, at least ten per cent of the sample were in jobs which previously had not been occupied by a graduate. This is also a rather imprecise measure of underemployment as it says nothing about the newly created jobs (and a third of graduates described their job as a new job).

iii. Four out of five graduates classified their jobs as at broadly graduate level. This summary figure was arrived at by asking them their views as to whether or not a degree was relevant to getting or doing their job. Three out of four said that it had been necessary or helpful. However, less than half said that a degree was a formal entry requirement and only 11 per cent joined a graduate entry programme. Furthermore, only 43 per cent said that the work required graduate ability.

iv. In a direct question about their own assessment of underemployment, 33 per cent felt slightly and 26 per cent very underemployed. Thus, the majority felt underemployed in some way. More of the 1993 cohort (two thirds) felt underemployed suggesting that it is a growing trend. As might be expected, more of the graduates in jobs traditionally classified as non-graduate work (according to the SOC) felt very underemployed, though over 11 per cent of those in professional jobs also felt this way. The main ways in which they perceived themselves to be underemployed were the lack of intellectual challenge in their jobs, the under-use of their degree skills and feeling that they had more to offer than was being asked of them.

v. Three quarters of graduates felt that their degree had been an important factor of influence in getting their current job, but only half felt it was a very important factor. Rather fewer, 58 per cent, felt that the specific subject of their degree was important.

Pay

A wide range of salaries was reported, reflecting the equally wide range of jobs and progress the graduates had made in the labour market. The average (median) salary, however, was relatively low, between £12,000 and £14,000. Only 25 per cent of the survey respondents were earning above £16,000.

The average salary of the 1991 cohort was higher than the average for 1992 which in turn was higher than for 1993, which would be expected as each cohort had spent longer in the labour market. Ten per cent of the 1991 cohort were earning in excess of £20,000, but almost half were earning less than £14,000 which appears low for some three years after graduation (and low in comparison to the national average (median) for graduate vacancies in 1995 of just over £14,000 (see AGR, 1995). The 1993 graduates' salaries (currently, *ie* in 1994) also look comparatively low in comparison to national averages for graduate starting salaries (*ie* the 1993 median for newly qualified graduates was just over £13,000). The relatively low salaries reported, both at starting level and after progression, is linked to the high proportion of graduates in jobs where a degree was not an entry requirement (see above) and in the non-professional/non-managerial category.

The highest earners, in all three years, were graduates from mathematical sciences (*ie* IT, computer science and maths).

7.9 Job getting

Despite the evidence that a degree was not generally an entry requirement for most jobs, most graduates felt that a very important factor in securing their current job was that they had a degree qualification. Other factors of influence deemed very important included the specific degree subject (by 32 per cent), work experience since university (by 39 per cent) and work experience prior/during university (by 25 per cent). BSc graduates, especially those with engineering/technology degrees, put more emphasis than other graduates on the subject of their degree as an important factor of influence. Having a degree was considerably more important for those in graduate level occupations than for others. Other factors of importance included their postgraduate qualifications, personal characteristics and their personal contacts.

The vast majority of graduates had taken their current job because it suited their skills and interests. Other reasons, such as attractive prospects or the only job option available were much less significant.

Most had been recruited via an interview. A relatively small proportion of graduates had experienced multiple selection

methods including aptitude tests, group discussions, and personality questionnaires as well as interviews.

7.10 Job satisfaction

The main difficulties graduates had experienced in their jobs related to dissatisfaction with training provision, career opportunities, and a lack of sufficiently challenging work. Lack of career opportunities featured as a greater difficulty than the others.

Overall, graduates had relatively high expectations of aspects of their job when they started it, in particular with the volume of work, getting feedback on performance, the variety of work, career opportunities, and training provision. By comparison, expectations about using their skills and knowledge gained at university, autonomy and level of responsibility, were lower.

Experiences on the whole lived up to these expectations, the main exceptions being the career opportunities available, training, and getting feedback where expectations were slightly higher on average.

The majority of graduates were generally satisfied with their current job. Around one in four was dissatisfied, the main areas of dissatisfaction being those highlighted above, namely: lack of career opportunities, level and volume of training, getting performance feedback, volume of work, and the extent to which they were supervising others. The main area of dissatisfaction was getting performance feedback, followed by the lack of career opportunities.

Some of this dissatisfaction related to the level of job they were in. Most of the dissatisfaction came from graduates in lower level jobs, in particular those in clerical and secretarial occupations and those who perceived themselves to be very underemployed. The latter were especially concerned about the extent to which they were using their degree skills and subject knowledge.

7.11 Career development

Career planning was first engaged in at various stages. Only one in three graduates had started thinking about their career before coming to university and slightly more (41 per cent) did so while at university. An increasing trend to start thinking about career development earlier was identified. Those who had done so at an early stage were more likely to have gained a permanent graduate level job and not to have experienced any unemployment.

Four out of five graduates had used the services of the university's Career Development Unit (CDU) before graduation, and 40 per cent had done so afterwards (some had done both). More of the 1993 graduates had used the CDU than the 1991 graduates.

Almost all of the graduates had experienced some difficulties in the development of their careers since graduation. The most commonly encountered was a lack of job opportunities. Over 40 per cent, however, felt they had suffered from a lack of career direction and a third a lack of career guidance (again since graduation). This is a clear message to careers guidance specialists and evidence of a currently unmet need for graduates to get access to careers guidance and advice after graduation as well as before. Other career difficulties related to their lack of specific skills or insufficient job training provided.

Despite these difficulties, the overall level of satisfaction with careers to date was quite high: half of the graduates expressed some satisfaction and a quarter considerable satisfaction. Most dissatisfaction lay with the job opportunities available to them.

Career satisfaction appears to be on the decrease, particularly in relation to job opportunities available and the use of their skills and knowledge. This is likely to relate to the greater difficulties encountered by more recent graduates in finding suitable employment, and the increasing levels of perceived under-employment.

7.12 Conclusions

The survey has shown what graduates from the University of Sussex really do, both initially and in the first few years after graduation. It is the first large scale follow-up survey of this kind ever undertaken at the university and has enabled a longer term perspective of the graduate labour market to be taken, rather than having to rely only on initial destinations data for analysing labour market trends.

There is some good news and less good news for the university and its students in these findings. On the one hand, they show that substantial numbers make the transition to employment fairly smoothly and obtain well paid, professional level jobs. Some subjects do considerably better in this respect than others. The research also confirms that success in the labour market increases as time passes, so that the proportion of graduates in permanent jobs three years following graduation is much higher than initially. On the other hand, many graduates take some time to get into permanent jobs, sometimes taking temporary work as a route in, and experience unemployment and continuing underemployment. Early careers can be periods of turbulence, and substantial numbers end up in relatively low paid jobs, not making full use of their skills and abilities.

Careers are becoming increasingly complex, as graduates from different discipline backgrounds move into and out of jobs and periods of further study in different patterns, and are influenced in their decisions by a range of factors. There is a diverse set of career routes being followed. Immediate entry into permanent work, and staying in continuous employment, is no longer the norm, and there is an absence of a stereotypical career profile.

The research has also shown that the problems in the graduate labour market are enduring. While initial unemployment levels have fallen from the low point of the early 1990s, many graduates continue to have difficulties securing the jobs they want and others feel dissatisfied about their career development, mainly due to a lack of job opportunities and access to continuing careers guidance.

One conclusion is clear. Graduates now face a rapidly changing, less predictable, and more competitive labour market than their predecessors even a decade ago. The notion of what constitutes a 'graduate job' has broadened and the assumption that graduates attain secure, permanent and professional level employment is less tenable now than it ever was. New graduates face a number of challenges — the need to develop the personal skills to respond flexibly to workplace change, to acquire relevant work experience before, during and immediately after their degree in order to compete for the career opportunities available, the ability to confront an increasingly 'casualised' labour market and, in flatter organisations, to accept that there will be fewer opportunities for upwards progression. Finally, they need to be able to revisit the career planning process on a frequent and regular basis.

Given the magnitude of these challenges, students will need to think about their career and personal development long before graduation if they are to manage the transition from university to employment successfully.

This research has provided a valuable bank of data concerning graduates' jobs and career experience. This offers the University feedback about its former students and, in addition, will inform the career planning and decision making of both current and prospective students.

Appendix: Employer Interviews

To supplement the graduate survey, and to provide a perspective from the employer's side on trends in the graduate labour market, views of employers were obtained via a small interview survey. Ten interviews were undertaken with employers of graduates from the University of Sussex, ranging in size from the very small (under 20 employees) to the very large (over 2,000) employers. They included two manufacturing and eight services companies, including scientific and information services, retail, publishing, insurance, and public and community services.

Four areas were covered in the interviews:

- entry methods for graduates
- recruitment and jobs for graduates
- demand for graduates, including skill requirements
- recruitment processes.

A summary of the survey findings is presented below.

Summary

Entry methods

Three main entry methods were identified:

- Half of the organisations had formal **recruitment schemes** for graduates and this was the main way in which graduates entered their organisation. They tended to be the larger organisations. Schemes could last up to two years.
- Nine of the ten organisations recruited graduates to **specific** posts (*ie* advertised for a graduate). It was the main entry method for graduates at four of them. They included a number of small to medium sized businesses who considered that they were too small to need a graduate scheme.
- **'Accidental'** graduate recruitment (*ie* not specifically sought for a vacancy) was acknowledged by six organisations, but was the main entry for graduates at only two of them. In one company five graduates were recruited each year this way, and this entry method was seen to be expanding.

Four out of the five organisations with graduate schemes also recruited graduates specifically or 'accidentally' outside of the formal scheme.

Most companies were making some changes to their graduate entry, but there was no evidence of a trend towards or away from formal schemes. For example, one large organisation was expanding a scheme running in one division of its business to other divisions, but had abandoned a graduate entry scheme two years ago run by another division. Another company was considering starting up a graduate scheme if future recruitment needs justified it, a third operated a scheme in occasional years, and a fourth had a well established scheme in one division (retail) but had abandoned it in another (finance) because of a lack of vacancies.

Recruitment and jobs for graduates

Graduates were recruited to a variety of different functions and jobs, confirming the graduate survey evidence (Chapter 5) of the breadth of the graduate job market. Those taken onto formal recruitment schemes tended to go mainly into management and sales functions; while those recruited to specific posts went to a wider range of jobs (*eg* IT, sales, personnel, finance, R&D). 'Accidental' graduate recruitment took graduates mainly into support functions and to lower level sales and administration jobs, and were often seen by employers and graduates as 'stepping stone' jobs into higher level work.

Some organisations would not limit the filling of specific vacancies to graduates only, if the work did not require graduate ability. Another had recently opened up its entry requirements for some jobs (mainly sales, telesales, editorial work) and was encouraging more applications from non-graduates because of the high turnover experienced with graduate recruits caused by low job satisfaction.

Numbers recruited annually to the surveyed companies varied from just a handful to over 60, but the majority recruited between five and 30 annually.

Graduate demand and skill requirements

Graduate requirements varied considerably from organisation to organisation depending on the jobs being filled and entry methods. Some employers required graduates to have degrees in specific disciplines, while others did not. Yet others stated a preference for a certain background (*eg* numerate degrees, knowledge of the arts) but were prepared to be flexible for 'the right graduate'.

Most, however, shared a common set of skills being sought in graduate recruits which included:

- interpersonal skills — presentation, communication
- teamworking
- good listening skills
- problem solving
- planning and organisation

and common characteristics or qualities:

- well presented
- good or outgoing personality
- ability to fit in
- enthusiasm for the work of the organisation
- self motivation and ability to work without close supervision.

Most of the employers had little difficulty recruiting graduates with the skills and qualities they required but some were critical in general of some graduates' attitudes (*ie* arriving late for interviews, being unprepared) and their poor organisational and report writing skills.

Recruitment process

i. Employers had a range of methods for recruiting graduates including:

   - advertising, in press nationally (4) and locally (4), in trade/professional press (3) and graduate directories (2)
   - via universities, notifying careers services and using vacancy lists (4) and distribution of general information packs and brochures (3)
   - using recruitment agency (1) or recruitment consultant (1).

   They were generally used in combination and not equally for all vacancies on offer. Some individual university targeting was apparent, on a geographical basis (*ie* local institutions only) or for specific courses of relevance or based on their own measures of graduate 'quality' (criteria not revealed).

ii. Selection methods also varied. While all ten interviewed candidates, five also used tests of various kinds (*eg* numerical, verbal, technical ability) including three which used personality tests/questionnaires, two which used assessment centres, one a group discussion technique, and two invited candidates to make presentations. One had abandoned testing some time ago, while two were considering introducing it. Most organisations had a three stage process — first, sifting application forms/CVs, then interview (plus test), and finally more in-depth interview/ assessment centre (plus tests if not already done). The

majority required the candidates to visit the organisation twice, and one three times before deciding.

iii. The majority of employers had experienced fairly stable levels of graduate applications over the last few years but three had noticed an increase. One of them had also noticed a rise in qualification levels of applicants. Only one employer had taken any steps to deal with increased applications by tightening up selection criteria and focusing more on technical suitability of candidates. One employer commented that today's graduates were more serious about their applications and practised at interviews, though as highlighted above, others were generally critical of their attitude at interview.

Bibliography

Association of Graduate Recruiters (1993), *Roles for graduates in the 21st century: getting the balance right*, Goodman C, AGR, Cambridge

AGCAS (1995), *What do graduates do?*, CRAC, Hobsons, Cambridge (produced annually)

Arnold J, Mackenzie Davey K (1992), 'Beyond unmet expectations: a detailed analysis of graduate experiences at work during the first three years of their careers', (UMIST), *Personnel Review*, 21:2

Association of Graduate Recruiters (1995), *Graduate salaries and vacancies*, 1995 Summer update survey (and earlier surveys), produced by IES for AGR, Cambridge

Brennan J, Lyon E S, McGeevor P A (1993), *Students, courses and jobs: the relationship between higher education and the labour market*, Jessica Kingsley, London

CBI (1994), *Thinking ahead: ensuring the expansion of higher education into the 21st century*, CBI, London

Clarke J, Rees A, Meadows P (1988), '1980 graduates — where are they now? First Results from the survey of 1980 graduates and diplomats', *DE Gazette*, London

Connor H, Court G, Jagger N (1993), *Graduate Review 1993*, IMS, Brighton

Connor H, Court G, Pearson R, Jagger N (1996), *University challenge: student trends and choices*, an IES report to the CVCP (forthcoming)

Connor H (1995), 'Graduates: shortage or glut?', in *Future Skill Demand and Supply*, Metcalf H (ed.) PSI, London

Council for Higher Education and Industry (1995), *A wider spectrum of opportunities*, CIHE, London

CSU (1993-95), 'Graduate salary and vacancy surveys' (produced annually), *Statistical Quarterly (Nos 54-60)*, Manchester

CSU (1994), *The supply of new graduates 1993-95, trends and predictions*, Vol. 1, Manchester

Dolton P J and Makepeace G H (1992), *The early careers of 1980 graduates: work histories, job tenure, career mobility and occupational choice*, DE Research Paper 79, London

Gregson J, Taylor J (1987), *The graduate labour market: what happens to unsuccessful graduates?*, University of Lancaster, published by CSU, Manchester

Guardian (1995), *Graduate Facts 3*, The Guardian/Gallup Careers Research Project, The Guardian/Observer, London

HMSO (1990), *Highly Qualified manpower: supply and demand*, London

Johnes J, Taylor J (1989), 'The first destinations of new graduates: comparisons between universities', *Applied Economics*, 21

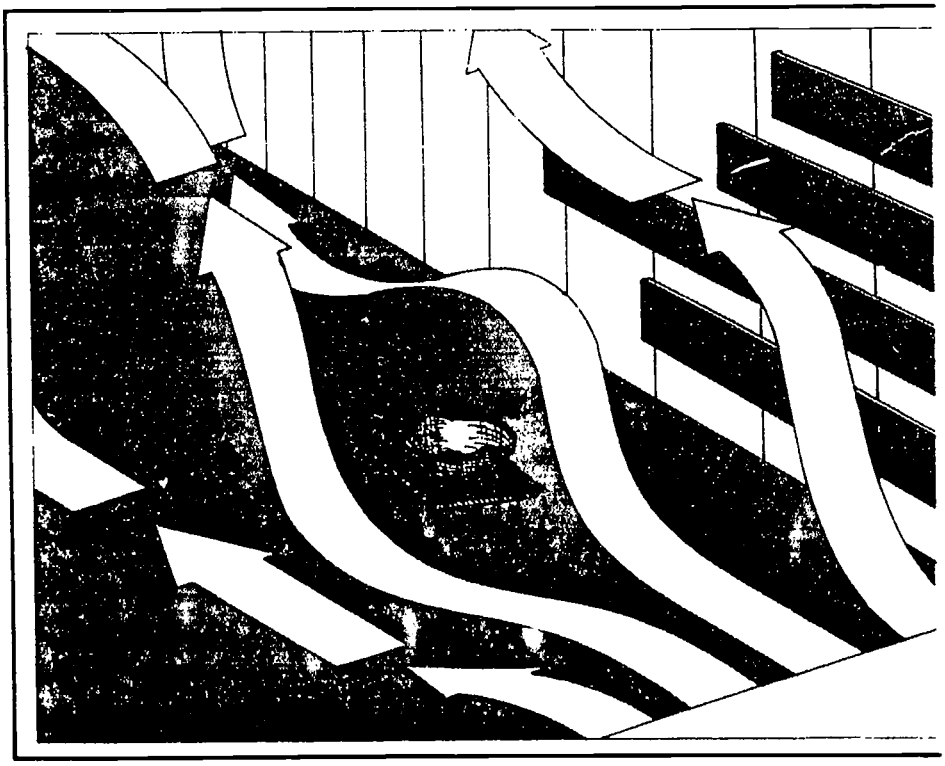
Mason G (1995), *The new graduate supply shock: recruitment and utilisation of graduates in British industry*, National Institute of Economic and Social Research Report Series, Number 9, London

USR (1992-1995), *'University Statistics*, Vol. 2: *First destinations of university graduates'*, Universities Statistical Record, Cheltenham (annual publication)

WHAT DO GRADUATES REALLY DO?
H Connor, E Pollard
Report 308, 1996
ISBN 1-85184-234-9

Graduates now face a less predictable and different labour market than their predecessors of even a decade ago. Finding out what graduates really do in the first few years after their degree studies, in terms of their employment outcomes and career paths, can help current and prospective students make better decisions about career plans and provide beneficial feedback to universities.

This is the subject of this report. It presents the findings of a larger scale follow-up survey of graduates from the University of Sussex in 1991-1993.



The Institute for Employment Studies
Mantell Building
University of Sussex
Brighton BN1 9RF
UK

Tel. +44 (0) 1273 686751
Fax +44 (0) 1273 690430

ISBN 1-85184-234-9
9 781851 842346